

## 5 Health and medical issues

### Background

On-board a flight from Dubai to Nairobi in 2010, an elderly passenger complained of heartburn and started to vomit. A doctor was found to be on-board the plane and examined the passenger. He was thought to be suffering from indigestion. Although he was given treatment for this, he later collapsed. One of the flight attendants recognized the symptoms of a heart attack and asked for a defibrillator. Another member of the cabin crew connected the defibrillator and a single shock was enough to restart the passenger's heart beating regularly. Other members of the crew took care of the passenger's wife, while the first flight attendant administered oxygen until the aircraft arrived at Nairobi airport. A medical emergency centre had been informed by phone and a hospital alerted; a doctor and ambulance were waiting for the passenger at the airport.

In another on-board health incident, a passenger had what was thought to be an asthmatic attack, but which subsequently turned out to be an anaphylactic reaction to aspirin. The patient was given oxygen and a nebulizer was set up, but he collapsed a few minutes later. A flight attendant performed CPR (cardiopulmonary resuscitation), which was successful and the patient was given intravenous adrenalin and other medication by a doctor. The flight diverted to Auckland and landed with two doctors, a nurse and two crew members assisting with the drips, medical equipment, and oxygen bottles, while supporting the patient. The ISC (In-flight service co-ordinator) took command of the cabin and another flight attendant gave the brace commands to the medical team. On arrival, paramedics met the aircraft. Other members of the cabin crew also played a part in the success of the diverted flight by distributing drinks in place of breakfast, which had had to be cancelled because half of the cabin crew were involved in assisting the sick passenger. They also reassigned positions for landing duties so that others were free to help with the emergency.

The nature of cabin crew medical training will depend on the airline they work for and may include handling minor medical emergencies, CPR, wound treatment, and a general understanding of medical procedures to assist passengers until fully trained medical personnel can take over the situation. As can be seen in the two examples above, the incidents may not always be minor. They may range from air sickness to emergency childbirth, from the psychological effects of fatigue to heart attacks and epileptic seizures. All flight attendants must usually hold a basic first aid certificate before they commence their initial training. Cabin crew may also be trained in the use of defibrillators, used for cardiac problems.

A recent advance in "telemedicine" is the Tempus IC device, now being tested on some planes. This is a complete remote medical diagnostic system. It delivers clinical grade medical parameters as well as video and audio via wireless communication systems.

In most cases, airlines will insist on medical clearance before allowing people with certain illnesses or conditions to fly. This may be necessary for people who have recently been seriously ill or had surgery or who:

- have an unstable medical condition
- need supplemental oxygen to help them breathe
- need to use medical equipment during the flight
- are travelling for medical treatment
- are very far along in pregnancy or are experiencing a difficult pregnancy

## Jargon Buster

**nitroglycerine** This is used in the manufacture of explosives but is also used medically as a vasodilator (something which makes the blood vessels dilate) to treat heart conditions, such as angina and chronic heart failure. It shortens or even prevents attacks of angina pectoris. Nitroglycerine comes in the form of tablets, sprays, or patches.

**allergy** A hyper-sensitive reaction to a substance or animal. Common allergens (substances that may cause a reaction in humans) are pollen, dust, nuts, seafood, and shellfish. Symptoms vary from person to person and reactions may include vomiting, hives, streaming nose and eyes, shortness of breath, and dizziness. People with severe reactions to certain substances are usually asked to inform the airline. On an aircraft, it is important that the cabin crew is trained to deal with allergy sufferers as, sometimes, the reactions experienced may be severe. Airlines cannot guarantee an allergen-free environment, but will try as much as possible to lessen the chances of a hyper-sensitive reaction. In the case of peanut allergies, this may mean asking passengers seated near to the sufferer to refrain from eating them during the flight or, if the reaction is serious, not serving the product at all. Serious allergic reactions, including anaphylaxis, occur rarely, but speedy intervention is crucial. A full medical kit will include adrenaline and an antihistamine (usually in injectable form). Passengers with known allergies may carry an EpiPen™ (an auto-injecting device like a pen), and some airlines now include these in their kits.

**intravenous** If a substance is given intravenously, it means it is given directly into the blood stream through a vein, either via a syringe or a drip. The intravenous route is the fastest way to deliver fluids and medications throughout the body. Cabin crews are not usually trained to administer intravenous drugs and this will require the presence of a doctor or nurse.

**anaphylaxis** An acute hyper-sensitive reaction, which may take several forms.

## Activity Assistant

- 9 The following are possible ways to describe the condition of the passengers in the picture. The teacher could elicit phrases for the first picture from the whole class. After this, groups of students could work on possible language to explain the situation in the other pictures. Alternatively, the teacher could elicit for the first picture as above and then give out the other phrases in a random order (on cards or a single piece of paper) and students could pick suitable phrases for a particular situation. These phrases could be gapped to provide a challenge to students, e.g. *“He’s trying to \_\_\_\_\_ other passengers”*.
- a She’s cut her hand / Her hand is bleeding (badly).
  - b He’s trying to force past other passengers / He looks like he may become violent.
  - c She’s having a fit / She’s lying on the floor shaking (trembling) / She’s shaking (violently/uncontrollably).
  - d He’s bleeding from his head / His head is bleeding (badly) / There’s (a lot of) blood coming from his head / I think he has cut his head.
  - e He’s holding his chest / He looks like he can’t breathe.
  - f She may be about to have the baby / She looks like she is going to give birth.
  - g She’s lying on the floor / She’s collapsed / She’s not moving.
  - h He is having difficulty breathing / He sounds like he can’t breathe.
  - i He’s got a (severe) stomach ache / He’s bent over in his seat.
  - j He looks like he has something stuck in his windpipe (throat) / He can’t breathe / He is having difficulty breathing.

- 13** As well as the five steps mentioned in exercise 12, you might like to ask students to discuss the following questions. There are two sets of questions. The first is intended for those students who are already working as cabin crew and the second for those who are in training.

**Set 1**

What were the symptoms that you noticed?  
Was there a doctor or nurse on board?  
Were appropriate medications on-board the plane?  
How did you communicate with the patient?  
How did you deal with the other passengers?  
Did you have to contact ground-based medical personnel?  
How did other passengers react?  
Was it your first medical incident?  
Did you stay calm? Did you feel you reacted well?  
What would you do differently next time?  
What was the most difficult aspect of the situation?  
What happened in the end?

**Set 2**

Have you had any medical experience?  
Which types of medical emergency would you feel confident about dealing with? Why?  
Which types of medical emergency would you not feel confident about dealing with? Why?  
Why do you think it might be important to tell a colleague, as recommended here?  
*(two heads are better than one, colleague may have or know someone who has useful, specific knowledge, the problem may need physical assistance)*  
What will you have to consider when making contact with the passenger?  
*(his/her ability to communicate, the passengers around her/him, tone of voice etc..)*  
In the book the example for planning ahead is predicting that you may need to move passengers to deal with the situation. What else may have to be done as a result of the medical issue?  
*(use of specialist devices, the use of blankets etc., rearranging duties between staff etc.)*  
What do you consider to be the most important qualities that a cabin crew member needs to display in successfully dealing with a medical issue?  
*(quick thinking, calmness, sensitivity etc.)*  
Have you ever been involved in a medical emergency or with a person with a medical problem? How do you think you managed? What aspects of your involvement were successful. Why? What aspects were unsuccessful? Why?