

Air Travel and Insulin Pumps

Most pump manufacturers advise that insulin pumps should not be exposed to x-rays and therefore it is advisable that they should not pass through the scanning equipment for hand luggage or the whole body scanners at airports – or indeed other security checks elsewhere that use similar surveillance technology.

There are exceptions to this – for example the manufacturer advises that Omnipod pumps and PDMs can safely pass through airport x-ray machines (but should not be exposed to medical x-rays).

However, the default position for the pump user at airports should be as follows:

- Carry documentation from a healthcare professional, usually doctor or diabetes specialist nurse, explaining that you have diabetes and are on an insulin pump. This letter should also explain the other equipment/supplies you need to carry, including insulin.
- Notify the security staff that you have diabetes, and that you are using an insulin pump and carrying supplies with you. Show them your insulin pump and infusion set. Explain to them that this is a life-sustaining device that is connected to your body and should not be removed unnecessarily. Request a walk through or hand-wand inspection.
- If the security staff insist on a whole body scan (Manchester Airport have advised that if a passenger refuses, having been selected for the scan, they will not be allowed to travel) either disconnect the pump and hand it to the security staff (preferred option) or remove the batteries before going through the scanner (an option with, for example, Roche pumps).

Before you travel it is worth:

- Checking your pump user guide and / or ringing the customer helpline to see if the device you are using is potentially affected by the screening equipment used at airports, including whole body scanners.
- Contacting your airline or airport for advice on their policy for those wishing to take medical equipment on board with them (remembering to enquire about requirements for the airport you are returning through and any intermediate stops as well as the departure airport).
- If necessary or if you have concerns, checking whether the airport has whole body scanners and, if so, whether you can opt for a hand search – bearing in mind that this may be more intrusive than a scan. You may also wish to ask if you can request that the scan is viewed or the hand search undertaken by someone of the same sex. In some parts of the world, such as the USA, security staff may allow passengers reluctant to go through the scanner, to opt for a hand search, often combined with swabbing of items such as pumps and infusion sets.

Continuous glucose monitoring systems (CGMS)

Medtronic report that the emission from their CGMS transmitter complies with Federal Aviation Authority regulations which allow use of the device to continue when travelling by plane. However, anecdotal reports suggest that CGMS users may be challenged and advised that signal transmitted from sensor to monitor could potentially interfere with the aircraft's equipment in the same way as a mobile phone signal. Medtronic advise that if requested to do so the user should switch off CGMS. Again it would be wise to contact the airport / airline to ask if they have a policy, so that if CGMS cannot be used on the plane then it can be switched off and the batteries removed before going through airport security.

If in use the CGMS should not pass through the x-ray equipment so should remain on the user's person and both sensor and monitor should be removed if the user has to go through the whole body scanner. If switched off the monitor can pass through the x-ray scanner.

This factsheet has been prepared by Dr Peter Hammond, Clinical Lead of the NHS Diabetes Insulin Pump Network. The aim is to aid people with diabetes who use continuous subcutaneous insulin infusion therapy (CSII) or continuous glucose monitoring (CGM) to be prepared for air travel.

The information included is based on advice received from the UK Civil Aviation Authority (CAA)ⁱ and information on the US Transportation Security Administration websiteⁱⁱ, as well as a recent editorial in the journal of Diabetes Technology & Therapeuticsⁱⁱⁱ and information on pump and sensor company websites. This factsheet is not intended to be a comprehensive review but a practical guide to provide to pump and CGM users.

ⁱ <http://www.caa.co.uk/default.aspx?catid=923&pagetype=70&gid=924&faqid=1342>

ⁱⁱ <http://www.tsa.gov/traveler-information/passengers-diabetes>

ⁱⁱⁱ DIABETES TECHNOLOGY & THERAPEUTICS; Volume 14, Number 11, 2012. Navigating Airport Security with an Insulin Pump and/or Sensor Andrew Cornish, B.A., and H. Peter Chase, M.D.