

Travel & Diabetes

Information for Health Professionals

Planning is an essential element to the success of any travel, especially if traveling with a young person with diabetes.

An appointment will need to be made with the diabetes doctor or educator at least 4-6 weeks before traveling. Young people will need to have their diabetes control reviewed and have a medical letter written containing their medical history. This can be used if there is a need to seek medical attention while traveling.

If traveling by air a medical letter is required to carry with medications and supplies, in case **'proof of need'** is asked for.

The National Diabetes Services Scheme (NDSS) card is also accepted as **'proof of need'**.

The key to a successful and safe trip is in the planning. Young people need have a 'Sick Day' action plan available to take with them on their trip.

To make the holiday safe and enjoyable, young people and families need to take into consideration the following:

- the length of the journey
- the possibility of delays
- the timing between insulin injections and meals
- the availability of carbohydrate foods
- access to medical services and diabetes supplies
- changes in the usual diet
- changes in activity levels
- changes in meal and sleep routines (especially when crossing time zones)
- a plan for managing illness when away from home ¹.

Overseas Travel

In July, 2007 new regulations were introduced regarding restrictions of carry on items such as liquids, aerosols and gels on board flights in and out of Australia. These new rules also apply when transiting on international flights within Australia ².

Prescription Medications and Medical Devices

Prescription medicines (e.g. Insulin) and prescribed medical devices (e.g. Blood Glucose Monitors) are allowed to be taken in carry-on baggage. As stated earlier **'proof of need'** must be provided for these items. Either a doctor's letter or NDSS card can be used.

Non-prescription medications

For non-prescription medications (e.g. Panadol) only enough medication for the flight can be taken on board.

Taking Medications through the Security Check

Medications need to be sealed in a 20 X 20 cm zip-lock bag. When going through the security check, the security officer must be told that medications are being taken on board. The plastic bag containing the medications should be removed from the hand luggage and placed separately on the X-ray conveyer belt. Documentation for **'proof of need'** needs to accompany these items.

The name on the label of the medications **must** match the name on the boarding pass. Some airlines suggest that travelers carry prescriptions with the medications. Before traveling contact should be made with the airline to see if they have any other requirements.

For more information regarding carry-on luggage visit the Australian Government – Department of Transport and Regional Service website: www.dotars.gov.au

Developing an 'Action Plan' for Managing Diabetes During a Flight

Diabetes doctors and educators need to assist the young person to develop an 'action plan' for the management of the diabetes during the flight (as well as for the rest of the trip). To assist with this it is a good idea to get a copy of the 'flight' plan which contains the departure and arrival dates and times. Airlines can also give approximate times and the number of meals that will be served during the flight. The airlines can also provide a meal menu if needed.

Adjustment to insulin doses for the flight can be managed in several ways but will depend on the time of departure and the duration of the flight e.g. if going to New Zealand which is a 4 hour flight there needs to be little disruption to the usual insulin routine.

Insulin adjustment on long flights

The following suggestions apply to young people who are on **2 to 4 injections of insulin** a day:

They should:

- keep a watch on the time of the place of departure (origin) and keep to the usual routine e.g. if on two injection per day, eat at approximately same times as usual. It may be necessary to carry some extra carbohydrate to make this possible.

Visit the Sweet Transition website at www.sweet.org.au

- know if on 4 injections a day to have pre-meal rapid/short-acting insulin during the flight.
- know that their intermediate/long-acting insulin can be taken as the passengers are settling for sleep.
- know once arrived at their destination to take insulin and food according to the local time.

Traveling with an Insulin Pump

Having an insulin pump can make blood glucose control easier when traveling. Pre-meal boluses can be adjusted for meals that come at odd hours or are larger or smaller than usual. If a meal is not wanted then the meal bolus is not needed. Dose adjustments can be made taking into consideration the lack of activity/exercise during the flight.⁴ If usually on multiple basal rates, a temporary basal rate can be used for during the flight. Discussions regarding the various options need to occur prior to travel.

Tips for Young People on Traveling

They will need to:

- carry some form of diabetes ID especially if traveling alone
- know **never be stop insulin** for any reason
- take extra BG readings during the flight
- that usually no insulin adjustments are needed if flying north or south
- that adjustments to insulin doses may be necessary if traveling east or west
- be prepared to give extra doses of rapid/short-acting insulin if the BGL is high
- be prepared for unexpected 'hypo's and always carry 'hypo' food with them at all times.
- carry extra carbohydrate with you as well as 'hypo' food.
- know that when carrying fresh food or fruit that they will need to declare it to customs. If re-entering Australia they will need to **declare all foods** they are carrying. It is an offence to carry undeclared foods into Australia.
- not ask for a 'diabetic diet' on flights as the meals often contain little carbohydrate
- adjust insulin regimens if on a short flight or if flying to some Asian cities where there is only a small time difference e.g. 2 -4 hrs
- know that extra insulin may be required for westward travel as the day will be much longer and extra meals will require extra insulin
- make sure that they have plenty of extra supplies of insulin and BG testing strips as these are not always readily available in other countries. They also may be called something different and may be very expensive
- check with their diabetes educator or insulin manufacturer prior to leaving about the availability of their insulin and what it is called in other countries.
- buy travel insurance before traveling overseas. Contact their local Diabetes Australia office for the name of travel insurance companies that handle policies for people with diabetes
- obtain a list of recommended medical facilities (if possible, contact names of doctors) in the counties/cities that they will be visiting to help with access to medical care if needed ^{1,3}.

Tips for Young People for Carrying Diabetes Supplies

They will need to:

- make sure they have enough supplies for the duration of the trip
- insulate the insulin to protect it from extreme temperatures
- have their supplies divided into two bags in case one bag is lost
- know never to place insulin in the hold of the plane due to the risk of exposure from extreme temperatures
- know if using insulin pens to pack some insulin syringes in case the pen breaks
- make sure they pack strips to test either urine or blood ketones.

Tips for the Young Person on an Insulin Pump

They will need to:

- pack some insulin syringes as well as rapid acting and long/intermediate acting insulin in case of pump failure.
- make sure they pack extra batteries and infusion sets.
- make sure they have insulin basal rates and bolus rate written down in case of pump failure. They will need a plan for converting to insulin injections if needed.
- pack some insulin syringes (or pens) as well as rapid acting and long/intermediate acting insulin in case of pump failure.
- pack extra batteries, infusion sets and other pump supplies
- take the telephone number of the pump helpline with you.
- know that the metal detectors at the security checks will **not** harm their pump or the insulin in the pump.
- know if using a Medtronic pump that they need turn off the remote control while on board the aircraft.
- know if using 'Real Time' blood glucose sensors that they **can not** be used on board aircraft and will need to be disconnected.
- know if using a Medtronic insulin pump that they can download a Medical Device Information Card from their website that can be carried with them and shown to security officers at security checks. www.medtronic

Education Requirements:

Topic	Content
<i>Travel & Diabetes</i>	<ul style="list-style-type: none">• discuss the importance of 'planning' prior to travel• discuss and develop a 'sick day' management plan during travel• discuss regulations and restrictions when travelling by air (domestic and international) discuss insulin adjustment particularly during international travel

Reference/s:

1. Clinical practice guidelines: *Type 1 diabetes in children and adolescents*. National Health and Medical Research Council, Australian Government, March, 2005; 207-209.
2. Australian Government Department of Transport and Regional Services website:
www.dotars.gov.au
3. Ambler G., Barron V., May C., Ambler E., Cameron F., *Caring for Diabetes in Children and Adolescents. A Parents Manual*. Sydney, Combined Children's Diabetes Services of NSW, National Capital Printing, Australia, 2001
4. Traveling with a Pump. Medtronic Minimed Patient Information.