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# Fitness to travel

## Assessment in the elderly and medically impaired

### BACKGROUND

As more people travel, and with an expanding aged population, the number of older travellers, including those with significant medical or physical impairment will increase significantly.

### OBJECTIVE

This article addresses the assessment of fitness to travel in these groups, particularly with regard to their varying standard of fitness and/or disability. These factors should influence all travel plans.

### DISCUSSION

Factors for consideration are: destination and itinerary; the traveller's current medical condition, state of health, mobility (if impaired), medication, preparation necessary, level of fitness; and assessment of precautions or protection needed for temperature and/or weather extremes, altitude and other influencing factors. The trip conditions, both possible and probable, should be assessed and matched with these factors before booking the trip – long before the planned departure. If the vacation is to be enjoyed, the destination and itinerary must be comfortably achievable within these confines for the individual(s) concerned.

### Travel can be stressful for travellers with special needs, especially the elderly, those with medical conditions, or the physically impaired.

Consideration and awareness of all possible travel factors and careful preparation can greatly reduce negative aspects of travel, including the long planned 'trip of a lifetime' or a business trip, where fitness, concentration and alertness are important. Travellers who have not planned their trip, or who have a medical condition, especially if it is unstable, that was not (properly) assessed with their doctor before leaving, may become ill during the flight or trip. Travellers should be healthy and physically fit enough to complete any aspect of the trip. This is especially important if the holiday is an 'adventure' trip which may include activities such as hiking, canoeing, or 'exploring' trips into remote areas. Such trips may be uncomfortable and/or with very basic accommodation (eg. tents, shelters), primitive transport and in hot humid zones or cold and inhospitable zones.

### Before travelling

Early assessment of travel fitness is particularly important for the older person, those with significant medical issues, the physically impaired, and those going on an adventure

trip that requires a particular level of fitness. Important considerations are:

- travellers with a medical condition should assess their travel itinerary and then book a specific appointment for a medical assessment and discussion of all travel factors before final plans are made or booked
- those with special requirements (including the physically impaired) must discuss special arrangements with their travel agent and ensure these are in place before the trip is booked (and re-checked before departure)
- comprehensive travel insurance is essential in case the trip has to be cancelled because of exacerbation of illness, and to cover all aspects of the traveller's medical condition, including treatment overseas with air evacuation home (accidents, including road traffic accidents, are quite common in all groups of travellers, and frequently overlooked).<sup>1</sup>

Travellers with significant medical problems may have acute exacerbations precipitated by long haul flights and jetlag,<sup>2</sup> or by commonly acquired conditions including traveller's diarrhoea, vector borne diseases, or rarer conditions such as altitude sickness.<sup>3</sup>

The advising doctor must be familiar with travel and/or travel medicine to advise how best to reduce risks or

complications while travelling. For those with significant medical problems, an additional visit to an appropriate specialist may also be of benefit – before final bookings are made.

## Assessment of the itinerary

Medical assessment of overseas itineraries must be considered for the elderly and the medically and physically impaired so that appropriate advice can be given (*Table 1*).

This may include:

- personal medical history
- health problems
- current medications
- medication needed
- malarial prophylaxis for areas visited
- special needs
- fitness for itinerary and/or activity
- areas of increased risk
- available medical facilities
- prior travel experience
- previous immunisations
- necessary immunisations.

Common problems travelling include: traveller's diarrhoea, simple accidents (eg. falls), road traffic accidents (especially motorcycles), malaria, respiratory, skin and bladder infections. Sexually transmitted infections (STIs) are prevalent overseas and must be considered. Overseas countries may have higher rates of STIs including hepatitis B, HIV, gonorrhoea and chlamydia, and more importantly, rarer STIs less known in Australia such as syphilis and chancroid.<sup>1</sup>

Vaccinations and malaria prophylaxis are essential for most countries other than the United States, Canada, and western Europe. Travellers to the northern hemisphere in winter may need flu vaccination, especially the elderly or medically impaired. Medication for diarrhoea and vomiting may be prudent.

## Elderly fit travellers

Overseas flights and travel usually cause no problems for older people in good health, although recovery from jetlag may take longer than in younger travellers.<sup>2</sup> Itineraries should be planned accordingly with an extra stop on route and 'catch up' period before commencing busy schedules.

Long periods of immobilisation on long haul flights carry an increased risk of deep vein thrombosis (DVT) especially in the elderly or those with clotting disorders. Leg exercises, regular mobilisation and drinking sufficient water (rather than tea or coffee) to prevent dehydration reduces the risk.<sup>1</sup>

## Travelling with medical conditions

All patients with a medical condition should seek advice from their specialist or own doctor (if experienced in travel

medicine) and/or a travel medicine doctor before planning a final itinerary or before bookings are finalised and travel insurance purchased. Medical identification such as a 'MedicAlert' bracelet/necklace will inform others of important conditions in the event of an emergency. A medical history summary and medication list should be carried at all times.

## Respiratory and cardiac conditions

Patients with potential breathing difficulties (including asthma) or exertional breathlessness must be fully assessed before travel. Aircraft cabins are pressurised at 5000–8000 ft, where lower barometric and oxygen partial pressures (even the altitude of some destinations) can impact respiratory and cardiac problems.<sup>2</sup> Supplementary oxygen may be necessary but must be booked before travel (except for emergencies). Wheelchair or transport to transit areas can be arranged.

## Diabetes

Careful planning is essential for diabetics, especially the insulin dependant, or those with difficulty in good blood sugar control.<sup>4</sup> Time zone changes, long haul flights, different foods and exercise routines can all cause control difficulties. Travel and itineraries should be carefully considered in consultation with the treating doctor. Diabetic meals can be booked on most airlines but may not be the carbohydrate standard of home meals. Despite lack of refrigeration, insulin does not degrade at cabin temperatures on long haul flights (6–12 time zones). The key to successful diabetic control is the capability to monitor blood glucose while balancing food and exercise with medication doses and times. Further excellent information is available (see *Resources*).

## Physically impaired travellers

Impairment includes those with hearing or vision deficiencies, mobility problems such as arthritis and/or joint problems (including fractures of the lower limb), or those needing a wheelchair. Considerations are similar to those for the elderly and those with medical conditions. Pre-planning is essential, with the travel agent ensuring airlines booked provide appropriate services and facilities. It is important to double check arrangements are in place before departure.

Most organisations for the physically impaired (and visually and hearing impaired) provide travel advice and have contacts with similar organisations overseas. Advise patients to service personal wheelchairs (especially electric) before travel and to take spare parts (especially tyres as punctures can occur more often overseas from poor surfaces).

Advise use of a personal manual wheelchair to get to the departure gate, as using an airport wheelchair that is unsuitable or uncomfortable may cause pressure areas/sores and may also be poorly maintained and therefore dangerous.

**Table 1. Itinerary assessment checklist**

Assess	Consider
The length and time of the flight and trip	Number of stops necessary for comfort
Type of trip: business, pleasure, extended work period	Duration, timing of flights, destinations, duration of stay
Countries/regions of itinerary	Urban, rural, jungle, desert, altitude, inhospitable regions
Weather	Temperature, rainfall, heat, cold, wind extremes
Transport, accommodation, facilities	Luxurious, basic – extra needs?
Type of trip	Single resort style, multiple itineraries
Time schedule	Single, multiple destinations
Medications necessary	In carry-on luggage: asthma, decongestants, nitrates
	Sufficient quantity of medications packed (allow for delays)
	If necessary
Spare glasses, batteries for hearing or other aids	Antidiarrhoeals, antiemetics, antimalarials
First aid kit/medications needed	

**Immunocompromised**

Even in the presence of underlying disease, many medical conditions can be treated as for any traveller, including:

- diseases having cortisone treatment at doses 20 mg or less per day for less than a month
- HIV patients with sufficient lymphocytes (their specialist must advise before travel)
- over 3 months postchemotherapy.<sup>5</sup>

However, specialist advice must be obtained and travel insurance confirmed before booking travel – insurers may exclude or refuse cover, or their policy may have 'fine print' needing careful pre-purpose assessment.

**Surgical conditions**

Recent spinal anaesthesia can cause a moderate to severe headache up to 7 days later. Postabdominal surgery – intra-abdominal and/or intestinal gas expands and could cause bleeding and pain until it is reabsorbed (7–14 days).<sup>2</sup>

**Packing for the trip**

To prevent injury, purchase light suitcases with wheels, and 'sets' of suitcases where a small suitcase clips on to the main suitcase. This makes transport easier if trolleys are unavailable.

Necessary medication should be packed in carry-on luggage in original containers with a chemist label; with patient name, medication name, dose and frequency, and with a doctor's list of medications, especially for:

- asthmatics, emphysema – 'relievers and preventers'
- epileptics
- diabetics – oral medication and insulin needles, syringes, blood glucose monitors and sharps container, sugared snacks. Airport security will need a formal letter from the treating physician stating insulin by injection is essential

- cardio patients – sublingual nitrates, all medications and recent ECG.

Advise careful planning of dose times – keeping one watch on origin time and marking times when the medication should be taken during the trip may help. Dosage times can be slowly adjusted until they correspond with the destination time zone.

**The trip**

**Airport stressors**

- Carrying or manoeuvring baggage
- Walking long distances
- Generalised noise
- Multiple announcements
- Jostling with crowds.

**Travel stressors**

Additional physical (and mental) stresses can continue with:

- low aircraft cabin pressures – air in body cavities expands and may cause discomfort in the ears and sinuses (and tooth fillings). Valsalva manoeuvre, using decongestant nose drops before descent, chewing gum and swallowing may help
- aircraft noise or noisy passengers
- temperature (too cold/too hot)
- low humidity causing sore eyes, dehydration
- cramped seating
- turbulence
- 'sick' passengers – infectious disease transmission is similar in any confined space. Aircraft ventilation systems have highly efficient filters that remove bacteria, fungi and most viruses.

**Ongoing stresses**

- Jetlag
- Climate and temperature extremes

- Tight or heavy schedules
- Altitude
- Contaminated water or food
- Insects (eg. mosquitoes) or other vectors causing disease
- Physically demanding schedules where insufficient preparation has taken place.

## Conclusion

Careful pre-travel preparation is essential. All stressors need to be carefully identified and assessed, and strategies planned to reduce these. Planning, with careful attention to the travel aspects discussed in this article, will allow most travellers to arrive at their destination tired but none the worse for their flight. Bon voyage!

## Resources

- [www.cdc.gov/travel/](http://www.cdc.gov/travel/)
- [www.smartraveller.gov.au](http://www.smartraveller.gov.au)
- [www.who.int/ith/en/](http://www.who.int/ith/en/)
- Elderly travellers: [www.travelhealth.gov.hk/english/travel\\_special\\_needs/elderly.html](http://www.travelhealth.gov.hk/english/travel_special_needs/elderly.html)
- Elderly travellers' insurance: [www.1worldinsurance.com/travel\\_insurance/plans0001.html](http://www.1worldinsurance.com/travel_insurance/plans0001.html)
- Physically disabled travellers: [www.emich.edu/coe/cate/travel.html](http://www.emich.edu/coe/cate/travel.html)
- Diabetes: [www.diabetesnsw.com.au/PDFs/About\\_Diabetes\\_PDFs/TravellingDiabetes.pdf](http://www.diabetesnsw.com.au/PDFs/About_Diabetes_PDFs/TravellingDiabetes.pdf).

Conflict of interest: none declared.

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