

## Supporting travellers with obesity

Information on pre-travel preparation, tips to stay healthy abroad and links to useful resources

### Key messages

- **With good pre-travel health preparation, most people who are overweight or living with obesity can travel without experiencing significant health issues.**
- **Pre-travel planning is essential for all travellers; overweight and obese individuals need to consider their travel plans carefully and if appropriate, discuss them with a health professional before booking their trip.**
- **People living with obesity may face specific weight-related health risks during travel. These include increased risk of venous thromboembolism during long journeys, higher incidence of acute mountain sickness at high altitude (due to nocturnal oxygen desaturation and obesity-hypoventilation syndrome) and worsening of co-morbidities.**
- **All travellers should obtain comprehensive travel health insurance and declare their full medical history to the insurers.**

### Overview

This factsheet is designed to support travellers with weight issues, and promote careful pre-trip planning to help them enjoy safe, healthy travel. Being overweight or obese refers to excess body fat that may have significant lifelong implications for physical and mental health (1, 2).

Body mass index (BMI) is a measure that uses height and weight to work out if a person's weight is healthy. BMI is calculated by taking a person's weight in kilograms and dividing it by their height in metres squared ( $\text{kg/m}^2$ ) [2, 3]. For most adults: between 18.5 and 24.9 is classed as a healthy weight, between 25 and 29.9 is overweight and between 30 and 39.9 is classed as obese.

Excess weight can put an individual at increased risk of developing a range of diseases, including:

- Cardiovascular diseases (mainly hypertension, heart disease and stroke).
- Certain cancers.
- Diabetes (type 2).
- Osteoarthritis.
- Psychological issues (such as poor emotional health, disturbed sleep, impaired self-esteem and prejudice).

## Pre-travel preparation

Risk management advice for travellers who are overweight or obese should follow that of general travellers but be tailored to their specific needs.

Research indicates that obese travellers face specific weight-related health risks during travel. These include increased risk of venous thromboembolism during long journeys, higher incidence of acute mountain sickness at high altitude (attributed to nocturnal oxygen desaturation and obesity-hypoventilation syndrome) and exacerbation of co-morbidities [4].

All travellers should be advised to research their destinations and planned activities in detail. For travellers living with obesity, this means considering their journey and accommodation at their destination carefully. They may need to factor in extra time to arrive at the airport or station and make arrangements for luggage transportation. Travellers with mobility issues need to research accommodation prior to booking to ensure suitability and safety.

Destination-specific risk management advice and information can be found on our [Country Information](#) pages and the [Foreign, Commonwealth & Development Office](#) website. Comprehensive travel insurance is essential for all travellers. A full declaration of medical conditions should be made to the insurers. All equipment and planned activities should be covered.

All travellers should have a plan of what to do should they become ill during travel and need medical help.

In European Union (EU) countries, travellers should carry [a European Health Insurance Card \(EHIC\) or a Global Health Insurance Card \(GHIC\)](#). These allow access to state-provided healthcare in some countries, at a reduced cost or sometimes for free. The EHIC or GHIC, however, is not an alternative to travel insurance. Check [GOV.UK website](#) for updates and advice.

Travellers should carry a first aid kit tailored to their destination to help manage common issues such as insect bites, cuts and grazes, travellers' diarrhoea or headache.

Travellers under the care of a medical specialist should discuss their travel plans carefully with their supervising consultant, ideally before booking their trip. Specific issues to address pre-travel include:

- Are there likely to be any issues with travelling or flying?

- Is mobility restricted?
- Are there any underlying conditions – if so, are they stable?
- Can specific interventions (e.g. behavioural measures, vaccination or preventative medication) be recommended to reduce exposure to travel related hazards?
- Does the individual have comprehensive travel insurance?

## Medication

All travellers taking regular medication should plan well ahead. A letter from the GP or prescriber detailing the medicines is advised. Some countries do not permit certain medicines; others may have regulations requiring specific permission for some medication to be brought in to the country. These rules can also apply to medicines available over the counter in the United Kingdom (UK). Counterfeit (fake) drugs are more common in certain regions and can be a significant health risk. Further information can be found in our [medicines and travel factsheet](#).

## Obesity hypoventilation syndrome and sleep apnoea

Obesity hypoventilation syndrome (OHS) also known as Pickwick syndrome, is a combination of obesity (BMI  $\geq 30$ ), sleep disordered breathing and daytime abnormally high carbon dioxide blood levels (hypercapnia: PaCO<sub>2</sub>  $\geq 45$  mmHg at sea level). It is usually diagnosed in the absence of an alternative explanation for inadequate breathing (hypoventilation) [5, 6]. OHS is a risk factor for dangerously low blood oxygen concentrations (hypoxaemia) during air travel [7].

Travellers with OHS should seek specialist advice before travel. A hypoxic challenge test (HCT) before air travel is recommended for all OHS patients. Individuals with a positive HCT are advised to use non invasive ventilation or on-board oxygen [7].

Approximately 90% of patients with OHS have obstructive sleep apnoea [5] where breathing stops and starts during sleep. The most common type is obstructive sleep apnoea (OSA). Sufferers may need a portable device called a Continuous Positive Airway Pressure (CPAP) machine at night to keep their airways open [8].

Travellers with OSA who use CPAP should check availability of power, voltage and plugs both during travel and at their destination. Airlines, cruise ships and train companies should be informed before travel and confirmation of availability of power supplies for CPAP be requested. This is especially important for long journeys [8].

A letter from a specialist or sleep clinic explaining that CPAP is medical equipment for personal medical use should be carried. CPAP should always be taken as hand luggage and travellers with OSA are advised to carry a medical alert card or clinic letter [8, 9].

## Journey risks

Practical journey constraints include inadequate space, restricted seat belts and safety-related

weight limitations. Pressure for space in economy class airline seats, on trains, ferries or during bus journeys, is particularly relevant as limited leg room and seat width may be particularly detrimental [4].

## Venous thromboembolism

Venous thromboembolism (VTE), including deep vein thrombosis (DVT) and pulmonary embolus (PE) can occur as a result of long periods of immobility associated with any type of travel. Travellers who are overweight or obese are at increased risk. They should be advised of the signs and symptoms of VTE and follow prevention guidance including mobilising as much as possible during journeys and remaining well hydrated. They should also get advice from their health care provider and consider wearing properly fitted compression socks. Low molecular weight heparin therapy may also be recommended. Further information is available in our [venous thromboembolism factsheet](#).

## Vaccination

All travellers should be advised to ensure they are in date with the UK vaccine schedule and any travel vaccines recommended for their destination. In the UK, adults with a BMI  $\geq 40$  are eligible for a free annual NHS flu (influenza) vaccine [10].

There is some evidence to suggest that obese individuals may not have an optimum response to vaccines [11]. Therefore, it is important to encourage these travellers to comply with all doses of any recommended vaccine schedules, to ensure they are protected.

## Food and water-borne risks

Travellers' diarrhoea is the commonest illness experienced by travellers visiting low-income regions [12]. All travellers should take care with [food and water hygiene](#) and know how to manage diarrhoea; details are available in our [travellers' diarrhoea factsheet](#)

## Vector-borne risks

All travellers should take particular care to [avoid insect bites](#). Travellers should avoid scratching bites and keep them clean and dry to avoid infection. Antihistamine and basic wound dressings can be helpful if the bite is causing irritation. Prompt medical advice should be sought if signs of skin infection develop.

## Malaria

All travellers to malaria risk regions should be familiar with the [ABCD of malaria prevention](#). Strict bite avoidance measures and compliance with antimalarials is needed. All potential drug interactions should be determined when prescribing antimalarials. Drug information should be

checked in the [British National Formulary \(BNF\)](#).

## COVID-19

Some people are at increased risk of severe infection from COVID-19. This mainly relates to age and any existing medical conditions and includes those prioritised for COVID-19 vaccination (see [Table 2 and 3 in Immunisation against Infectious Disease](#)). Those who are severely obese, with a BMI of 40 or above, are considered to be at higher risk of severe illness.

All individuals should follow [current UK recommendations](#) to reduce their risk of catching COVID-19 and passing it on to others.

Those who are at higher risk of severe infection should assess their individual circumstances, including medical facilities at their destination and consider whether postponing travel would be appropriate.

General guidance regarding [risk assessment for travel](#) during the COVID-19 pandemic and information about the [COVID-19 vaccination programme](#) is available.

## Other health risks

### Altitude

Travellers who are obese and planning to travel to or trek at altitude, should seek advice from a travel health professional and, if applicable, their own specialist. OHS is considered a contraindication to high altitude trekking, unless supplemental oxygen and prophylactic acetazolamide are prescribed [4]. Obtaining effective health insurance cover for high altitude travel may also be an issue.

See our [Altitude](#) factsheet for further information.

### Cruises

Travellers with excess body weight may prefer cruise ship travel, as it avoids many of the practical inconveniences of air travel [13].

See our [Cruises](#) factsheet for specific guidance for cruise passengers.

### Mental health

There is a recognised association between excessive body weight and mental health issues, with significantly higher anxiety rates, increased alcohol intake and mood disorders reported [4]. Travellers with significant weight issues are likely to face increased pressures when preparing for

international travel. The importance of carefully planning an itinerary may help to ensure a safe trip, but can exacerbate this pressure [13].

Cultural attitudes towards obesity vary worldwide and some travellers may encounter negative attitudes [13]. Weight bias and stigma, coupled with body image concerns can contribute to significant emotional distress [4].

Further advice is available in our [Travel and mental health](#) factsheet.

## Sun protection

All travellers should follow [sun protection](#) recommendations: use high factor sunscreen, wear sunglasses, limit exposure and avoid the sun during the hottest part of the day. Travellers should seek urgent medical advice if they notice changes to moles, such as increasing size, itchiness, bleeding or oozing, or if a new mole develops very quickly.

## Travelling for treatment

Recent estimates indicate that approximately 2% of global weight loss (bariatric) surgery is performed for medical tourists. Countries such as Lebanon, Mexico and Romania dominate as providers to individuals mainly from the USA, the United Kingdom (UK) and Germany. Lack of affordable bariatric healthcare and long waiting lists are some of the reasons given by those who choose to travel internationally for this type of surgery [14].

Potential risks of bariatric surgery tourism include lack of continuity of care, uncertainty regarding professional licensure of bariatric surgeons in some jurisdictions and higher complication rates [4].

Anyone planning bariatric surgery abroad should discuss their proposed operation carefully with a UK bariatric specialist prior to booking their trip. This should include a reminder of potential cultural/language barriers and guidance about the implications of having major surgery away from usual support networks. This helps ensure they make an informed decision about travelling overseas for such a complex operation. Individuals who decide on bariatric surgery abroad should ensure that arrangements for long-term care have been put in place before their operation [15].

See our [Medical tourism \(travelling for treatment\)](#) factsheet for specific guidance for individuals planning surgery abroad.

## General advice for those who become unwell abroad

All travellers should know when and how to seek prompt medical advice for:

- Signs and symptoms of infection, particularly fever.
- Prolonged diarrhoea and/or signs of dehydration.
- Swollen, painful/red skin and/or pus, especially around a wound.

- Animal contact such as bites, scratches or a lick to open skin.
- A tick bite in a country with tick-borne diseases.

When accessing health care abroad, travellers should inform health professionals of any medical conditions, explaining all treatment and medication, along with any other relevant background information.

Travellers should keep all treatment receipts and the travel insurance company should be informed as soon as possible.

## Resources

- [BEAT: The UK's Eating Disorder Charity](#)
- [British Lung Foundation: Holidays and travel if you have obstructive sleep apnoea](#)
- [Diabetes](#)
- [NHS: Healthy weight](#)
- [NHS: Weight loss surgery](#)
- [Respiratory diseases](#)
- [Sleep Apnoea Trust: Travelling With Your CPAP Following The COVID-19 Pandemic](#)
- [Sleep Apnoea Trust: UK Airlines and CPAP](#)
- [Travelling with additional needs](#)
- [Travel Insurance](#)

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Published Date: 30 Mar 2021

Updated Date: 23 Feb 2024