

SOLO SKYDIVING INSTRUCTOR MEDICAL CERTIFICATE

I hereby declare that I am physically fit. I have read the "Medical Notes for Instructors" overleaf (pages 2&3). I do not, and have not, suffered from any of the following conditions, which I understand may lead to a dangerous situation with regard to myself or other persons during skydiving*/I have had one or more of the following conditions and have declared full details to the certifying doctor*:

Epilepsy, fits, head injury, memory problems, dementia, recurrent blackouts or giddiness, disease of the brain or nervous system, high blood pressure, heart or lung disease, dislocated shoulder, recurrent weakness or dislocation of any limb, diabetes, mental illness, drug or alcohol addiction, significant impairment of vision or hearing, persistent infectious disease.

I further declare that in the event of contracting or suspecting any of the above conditions, or in the event of sickness absence in excess of twenty consecutive days, incapacitating injury or confirmation of pregnancy, I will cease to skydive or act as an instructor until I have obtained approved medical advice and recertification.

..... Name in CAPITALS Date of Birth Weight (Kilos)
..... Signature (to be signed in the presence of the medical examiner) British Skydiving Membership Number Height (Metres)

DOCTOR'S CERTIFICATE

I the undersigned, having read the "Doctor's Notes" overleaf (pages 4-7) and being both a medical practitioner and

- having access to the candidates NHS or military medical record*
- a consultant specialist treating the candidate*
- a CAA Authorised Medical Examiner/Military Aviation Medical Examiner*
- a holder of the Dip. Aviat. Med./Cert. Aviat. Med.*
- a British Skydiving Instructor*
- having successfully completed the Aviation Medicine Module of the Military Medical Officers Course*

assess that _____ is fit to act as a Skydiving Instructor, subject to any limitations shown below.

LIMITATIONS:
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Signature.....

Date of signature.....

Date of Expiry.....

(*Delete maximum of five lines, as applicable)

DOCTORS STAMP:

NOTES FOR SKYDIVING INSTRUCTORS SEEKING MEDICAL CERTIFICATION:

The National Health Service does not provide sports certification and you may be charged for this. You may also have to pay for any additional tests or referrals needed to clarify your fitness. Your GP, or the specialist treating you, will usually be the doctors who know most about you and so are in the best position to give advice. If they prefer not to be involved, you can approach other doctors for private sports medical advice. Doctors approved for aviation medical assessments (AMEs) are particularly suited to this work and can be located at <https://www.caa.co.uk/medical>. Some doctors may request to see a copy of your computerised NHS record before considering certifying you. This copy can be obtained from your NHS GP by making a Subject Access Request under the terms of the Data Protection Act and the General Data Protection Regulation. There should be no charge for the copy and it should be provided within one month of your Request.

You should be in robust physical health and able to exercise without restriction. Note that being unfit, being significantly overweight for your height or having frailty of aging will render you more prone to injury and less likely to pass your assessment. Your health must not only be good enough for your own skydiving but must also be good enough to reliably instruct and supervise your students, without unacceptable risk of incapacitation or distraction.

You must declare any regular repeat medication to the certifying doctor, whether tablets, liquids, injections, patches or inhalers (*contraceptive medication can be ignored for the purposes of this section*). Take them with you to your doctor's appointment if you cannot remember full details. You must declare any recurrent need to use painkillers. Previous prolonged or high dose steroid treatment should be declared.

Poor vision will endanger not only yourself but also other skydivers around you, including your students. Your vision must be good enough to read a car number plate (made after 2001) at 20 metres. If you need glasses or contact lenses to achieve this standard, you must always wear them when skydiving or instructing and should also take them to your doctor's appointment. You should not have a restricted field of vision or tunnel vision. Note that persons aged over 60 (or those over 40 who have a close relative with an eye condition called glaucoma) are at risk of losing field of vision without being aware of it, but that a free NHS eye test can detect this at an early and treatable stage. You should not be colour blind and should easily distinguish between red and green lights. If you do have that problem, you must inform your current chief instructor.

Your hearing (with hearing aids if necessary) should be adequate for reliable communication with your students and for your other normal drop zone interactions as an instructor. If it is not, then any alternative communication plans should be approved by STC.

Recurrent joint, back, sciatic or neck problems can be made worse by skydiving and can prevent you supervising your students adequately. You should not have recently injured yourself in any way, or if you have, you should have made a full recovery and regained full pain-free power and range of movement. If you have ever dislocated a shoulder, this will need careful assessment before you act as an instructor. Dislocated shoulders may recur with very little provocation. Any recurrence would not only put you at risk of injury in the air, but also render you incapable of full supervision of your students in the aircraft or in freefall.

Any form of heart or vascular disease including heart attack, myocardial infarction, coronary disease, angina, ischaemic heart disease, heart valve problems, heart failure, irregular pulse, palpitations, chest pain on exercising, peripheral vascular disease, Hypertrophic Cardiomyopathy (HOCM), cardiac pacemaker, aneurysm must be declared and assessed. Any family history of sudden death at an early age should be declared and formally assessed. You should not have uncontrolled raised blood pressure or hypertension. Note that over 40 years of age, blood pressure problems are often "silent" and painless at first and that for your own benefit you should have had a blood pressure check with a qualified professional every five years.

You should not have significant lung disease and should be able to exercise vigorously without impairment from wheeze or unusual breathlessness. Smoking is the commonest avoidable cause of progressive lung disease. Any history of inhaler use, asthma, emphysema, chronic bronchitis, Chronic Obstructive Pulmonary Disease, fibrotic lung disease, pulmonary embolism (clot on the lung), pneumothorax (collapsed lung) or Cystic Fibrosis must be declared to the assessing doctor. Serious chest infection or pneumonia may leave you impaired by hypoxia at normal skydiving altitudes for some weeks afterwards. Following such an infection, recertification is required if intending to act as an instructor above 8000ft within 3 months.

If you have any form of colostomy, ileostomy, urostomy, catheter, PEG, reservoir or other drainage, collection, infusion, shunt or pump device, you should be used to managing it while skydiving before you also take on instructor responsibilities. Surgical implants or artificial joints are acceptable provided you have good painfree function and have completed 20 problem-free jumps with the implant before starting or resuming an instructional role in the aircraft or in freefall.

All past surgical procedures should be declared, as should organ transplants and a history of anaemia. Good functional recovery and full wound healing should be present before seeking recertification. Any procedure deeper than superficial skin surgery requires recertification. Even minor skin procedures should be fully healed and painfree before restarting instructor duties.

Past head injury or fractured skull must be declared because memory or behaviour can be affected and require formal assessment. Epilepsy, fits, recurrent giddiness, dizziness, faints, blackouts or loss of consciousness must be declared. Cerebral Palsy, Myositis, Myasthenia, Muscular Dystrophy, Multiple Sclerosis, Parkinsons Disease or any other progressive disease of the brain or nervous system requires careful assessment. Some of these conditions can become worse with time and, even if you are not impaired at present, you may receive only a short-term certificate, requiring more frequent

reassessment. Stroke, transient ischaemic attack (TIA) or Vertebro-basilar Insufficiency (VBI) places you at risk of future incapacitation and usually exclude you from acting as an instructor. You should not suffer from disabling headaches.

Diabetes and any form of endocrine or hormonal disease or deficiency such as thyroid or adrenal problems must be declared. Diabetes well controlled by diet alone or by diet and metformin will often be acceptable. Many other treatments for diabetes will not be acceptable in the instructor role. If planning a life or career around instruction, bear in mind that even mild diabetes can deteriorate over time and may lead to loss of certification. The most important preventable cause for onset or worsening of diabetes is unhealthy weight gain. Osteopenia or osteoporosis (reduced bone strength) puts you at increased risk of injury but provided it is causing no pain or disability, does not prevent you from acting as an instructor.

You must declare any history of drug or alcohol dependence.

You must declare any history of possible mental illness including anxiety, depression, post-traumatic stress disorder, self-harming, suicide attempts or compulsory detention under the Mental Health Act. You should never have been diagnosed as having psychosis, schizophrenia, manic-depressive psychosis, bipolar disease or any other serious mental illness.

You should declare any significant learning difficulties, behavioural problems, ADHD, memory problems or any diagnosis or concern about dementia, Alzheimer's Disease or significant cognitive impairment.

You should not normally suffer from ear or sinus pain when flying or skydiving. If you do have this problem, plan to seek treatment before attempting certification.

You must declare any diagnosis of cancer. This will not necessarily stop you acting as an instructor but requires careful assessment.

If you donate blood, you must not skydive or act as an instructor in an aircraft or in freefall for the next 48 hours. Following that you should have had a subsequent blood test showing your blood count is still normal OR you must not skydive or act as an instructor above 8000 ft for the next 6 months. If you donate only plasma, not whole blood, you are restricted only for the first 48 hours.

You should not act as an instructor while on sick leave or certified as unfit to work. At your doctor's appointment you should declare any terminal diagnosis, sickness benefit, disability benefit or attendance allowance. You must also declare if you are waiting for the results of any tests or investigations or are under medical review for any problems

If you become pregnant, you must ground yourself unless you have obtained specific medical advice and short-term recertification.

Certain forms of infectious disease such as hepatitis, HIV or tuberculosis should be declared to the certifying doctor and specific advice taken. A tiny number may be a risk factor in face to face teaching, but others may pose a risk of transmission when giving or receiving first aid or resuscitation.

Once you have received medical certification, if your health changes in any of the ways mentioned above, or in any other way that might affect your ability to safely instruct and supervise your students, you must stop instructing until you have received qualified medical advice and recertification.

All seven pages of this form must be available at your doctor's appointment. Only the certificate on page 1 is required as part of your personal documentation.

NOTES FOR DOCTORS ASSESSING SOLO SKYDIVING INSTRUCTORS

Skydiving (sport parachuting) is a "risk sport" where there is always a small but persistent chance of injury or death. Some medical conditions may increase this risk. Skydiving itself may exacerbate some medical conditions. Solo skydiving instructors are already experienced skydivers but in addition have a role in teaching, briefing, supervising, physically assisting, assessing and debriefing novice and student skydivers both on the ground and in the air. They also have responsibilities including deciding when and where it is safe to jump, checking equipment, deciding when to progress students to more advanced levels and occasionally providing first aid. It is essential that instructors are both physically and mentally capable of carrying this responsibility. The purpose of the instructor doctor's certificate is to exclude problems that could adversely affect the safe execution of that role. The preferred certifier is the candidate's GP or unit MO or hospital specialist with full access to past medical records. Other doctors with appropriate aviation medicine training or skydiving experience are allowed to complete the certificate but should be aware of the pitfalls of certifying without access to the NHS or military medical record. Copies of the computerised NHS GP record are available to patients under the terms of the Data Protection Act and as of May 2018 the General Data Protection Regulation has eliminated any charge for this. It should be normal practice for a medical examiner to have sight of the NHS GP computerised record or military medical record before issuing a full validity instructor certificate. If that record is not available at the time of assessment, consideration should be given to issuing a certificate with only short-term validity e.g 3 months.

How much examination is needed? Firstly, confirmation of identity. Then, with full access to uneventful past records and normal direct questioning, possibly as little as Visual Acuity & Fields by confrontation, Pulse & Blood Pressure, upper limb strength, large joint & spinal mobility, brief cognitive assessment (eg GPCOG, MMT) and

urine or blood test for glucose. Positive factors in the history, questioning or examination require appropriate extra assessment.

The certifying doctor is not stating that a candidate will remain free of illness, injury or problems during skydiving in the future, but that history and appropriate examination have not revealed unacceptable risk factors at the time of assessment. In cases of doubt, or where further information is required, the Medical Adviser to the British Skydiving or the Safety & Technical Officer will be pleased to help and may be contacted at the address at the start of this form.

The following conditions are *usually* incompatible with general skydiving instructing: Any condition which can lead to blackouts, impaired consciousness or impaired concentration. Significantly impaired vision or hearing. Tendency to persistent or recurrent weakness or dislocation of any limb, particularly dislocation of the shoulder. Conditions requiring the use of medication with sedative or psychotropic side effects. Ischaemic heart disease, uncontrolled hypertension, other significant cardiac or respiratory disease, cerebrovascular disease, epilepsy, diabetes on treatment carrying significant risk of hypoglycaemia, mental illness, drug addiction, alcohol dependence, significant CNS disease, cognitive impairment.

When a candidate has a condition, which is presently stable and controlled and felt to be safe for instructing, but there is a possibility of deterioration over time, you do not have to accept the maximum period of validity suggested on this form. You can specify any shorter period of validity which you feel may be clinically appropriate for review or monitoring of the condition(s).

Cardiorespiratory fitness is important. Skydiving instructors make descents from unpressurised aircraft at heights of 2,500 - 15,000 feet above sea level without supplementary oxygen. At 15,000 feet there is a 40% reduction in available oxygen. A tachycardia of 120 - 160 bpm is common in experienced skydivers and may be present at the same time as relative hypoxia and considerable physical exertion. The skydiver will not normally be able to access medication or inhalers during the aircraft flight or skydive. Ischaemic heart disease, cerebro-vascular disease, aneurysmal disease and uncontrolled hypertension are usually unacceptable risk factors. Hypertension controlled at or below 140/90 is acceptable. Postural hypotension, either spontaneous or related to treatment, is an unacceptable risk factor. Recurrent unprovoked loss of consciousness or impaired consciousness is unacceptable. Recurrent fainting occurring only with specific provocation (e.g. phlebotomy or dental treatment) is acceptable. Cardiac pacemakers used to treat isolated heart block do not necessarily constitute unacceptable risk. However, where the heart block is just part of significant ischaemic heart disease, then the ischaemic heart disease itself will usually be an unacceptable risk.

Stable, well controlled asthma is usually acceptable provided the treatment enables the candidate to exercise in cold air without significant symptoms (see more detailed advice at www.britishskydiving.org/forms/). COPD limiting rate or distance of walking at ground level is usually unacceptable. A history of spontaneous pneumothorax is unacceptable unless successfully treated by pleurodesis or pleurectomy. A history of traumatic pneumothorax is acceptable provided recovery is complete.

Musculoskeletal fitness is required. Each hand should be able to operate personal equipment, support the student skydiver and be able to exert a pull of 30 lbs / 13.5kg in any direction and this should be assessed at the time of examination. During the parachute deployment there is a brisk deceleration, usually about 4g but occasionally up to 15g. The landing impact typically involves a descent rate equivalent to jumping from a wall 4 feet high, with a horizontal speed of 0 - 15mph. Occasionally the landing impact may be considerably greater than this. Pre-existing spinal or joint injuries may be exacerbated. Unstable spinal injuries or subluxation may be exacerbated by parachute opening forces or landing impact and are an unacceptable risk. Previous injuries must have healed and must not impair ability to assist the student skydiver. Osteoporosis increases the risk of injury both during parachute deployment and during landing but provided the instructor has been advised about this, it is acceptable. Previous **fragility** fractures of the spine or hip are unacceptable risk factors. Previous traumatic fractures should have healed and if any metalwork has been removed, time should be allowed for holes to fill and ossify for risk to be acceptable. Following joint replacement surgery, full wound healing and a return to normal fitness are required before jumping again. At least 20 non-instructional jumps should be performed with the prosthesis without any significant problems before recommencing instructor tasks in the aircraft or in the air. Normal peripheral sensation and co-ordination are required to activate the parachute but may be impaired by disorders of the nervous system or peripheral vasculature. Unilateral or bilateral partial lower limb loss in an otherwise healthy candidate who is already successfully skydiving following the loss is usually *medically* acceptable (but would require practical assessment by skydiving examiners). Unstable or dislocatable shoulders are particularly likely to dislocate again while skydiving. This is not only painful but risks further serious injury due to difficulty activating the parachute or controlling the parachute during landing. A dislocatable shoulder is an unacceptable risk factor for solo skydiving or for instructing unless the candidate has had successful stabilisation of the shoulder and retains good power and range of movement.

Obesity increases the likelihood of lower limb or spinal injuries but may be acceptable up to a BMI of 40 provided the instructor has been advised of the extra risk. This limit does not apply to the few obviously very fit candidates who have a raised BMI due to a large muscle mass.

The minimum acceptable binocular visual acuity is Snellen 6/12 (or maximum impairment Logmar 0.3), with a full visual field in at least one eye. When glasses or lenses are required to achieve this, they must be used on all descents and this requirement should be noted in the "Limitations" box. Blindness in one eye is acceptable provided the other eye has a full field and the candidate has adapted to monocular vision. Assessment may be by personal examination or by recent optician's report. Older candidates should be reminded of the advantages of a free NHS eye test. There is divided opinion on whether skydiving may affect the risk of recurrence of a previous retinal detachment, but there appears to be little good evidence for or against. Previous detachment is not a contraindication to instructing but an unquantifiable risk of loss of

vision will be an unacceptable personal risk for many candidates, unless the treating ophthalmologist is prepared to give specific reassurance. Red-Green colour blindness will not prevent instructing but should be noted in "Limitations".

Epilepsy occurring after the age of 5 years is an unacceptable risk. Normal peripheral sensation, co-ordination, power and immediacy of response are required for safe skydive instructing. Thus many chronic or degenerative diseases of the nervous system will become unacceptable risk factors as they deteriorate. A shortened certificate validity may be appropriate in some early cases.

Normal mental development and a stable mental state are important. The candidate must be alert, must respond to simple communications without hesitation or distraction and their behaviour must not pose a risk to others around them. The candidate must be able to understand what they are about to do and have capacity to give fully informed consent. Current neurosis requiring active treatment, history of psychosis, significant learning difficulties, impairment of memory, cognition or executive function, frontal lobe syndrome, pathological euphoria with lack of insight, severe attention deficit, impulsive self-harming, drug addiction and alcohol dependence all constitute an unacceptable risk for skydive instructing. Similarly, use of medication causing sedative or psychotropic side effects or impairing concentration is unacceptable. If an individual no longer has capacity to consent to risk or lacks insight but is nonetheless intending to continue or is being encouraged by others to continue, local safeguarding procedures should be initiated.

Middle ear or sinus disease may cause problems due to the rapid changes in ambient air pressure. The rate of descent in freefall may exceed 10,000 ft/min and under an open canopy 1,000 ft/min. Any skydiver can have occasional pain or rotatory vertigo during altitude change, but frequent recurrence may prevent adequate supervision of students. Tympanic grommets or ventilation tubes are not a contraindication - they actually relieve pressure differentials as long as they remain in place. Otosclerosis treated surgically by stapedotomy is an unacceptable risk unless the ENT specialist specifically advises otherwise. Bilateral deafness not correctable by hearing aids is usually unacceptable for instructors.

Stable and well controlled diabetes with no tendency to hypoglycaemia is acceptable (eg diabetes controlled by diet or by metformin alone). Treatments with a tendency to symptomatic hypoglycaemia may put both the instructor and also the student at risk and are unacceptable for instructing. Other chronic endocrine conditions, once fully controlled, are normally acceptable.

Expansion of gas in a viscus during the ascent to altitude can cause overfilling or separation of stoma bags. Starting with an empty bag and/or pre-emptive colonic lavage can reduce the risk of this social embarrassment. Traction from parachute harnesses can occasionally cause separation of bags. Urinary catheters with leg drainage bags are usually unsuitable for use with a parachute harness. Removal of the drainage bag and spigotting of the catheter for the duration of the flight and jump may be acceptable provided there is still bladder capacity. Neither stomas nor catheters are a contraindication for instructing, provided the candidate has already learned to manage them and has performed 20 non-instructional jumps with the device, without distraction or significant problems.

Recent surgery is an unacceptable risk until all wounds have healed enough to withstand rough treatment. If you feel the wound is not ready for a contact sport such as Rugby football, it is probably not acceptable for skydiving. Particular caution is required after cranial, ophthalmic or thoracic procedures since any residual trapped gas will almost double in volume during the ascent to altitude but has no ready means of escape. Such residual gas is an unacceptable risk.

A history of malignant disease, particularly if well localised and outside critical areas, may not add significant risk. However, bony metastasis may cause an unacceptable risk of pathological fracture. Cerebral primaries or secondaries may affect behaviour or even capacity to consent and are unacceptable for instructing. Symptoms from treatments causing cardiac or pulmonary toxicity suggest unacceptable risk. Debility of widespread malignant disease is an unacceptable risk.

Even without skydiving, pregnancy inherently carries a risk of back problems, miscarriage, maternal haemorrhage and a risk of birth defects in the baby including brain damage. There are no published trials looking at whether the physical stresses of skydiving or the altitude hypoxia in the presence of asymptomatic placental insufficiency could alter the level of these risks significantly. Since any risk is unquantifiable, temporary and could affect not just the skydiver but also the person growing in the uterus, it should usually be assessed as unacceptable during the pregnancy.

Skydivers in perfect health are already at the limit of their physiological envelope when at 15,000 ft. Mild anaemia, causing no symptoms at ground level, may still cause light headedness or lack of stamina for important tasks when at altitude. Most blood donors will recover their normal blood volume within hours and haemoglobin levels within weeks of donation, but a few individuals with low iron stores may have a prolonged reduction. If blood has been given in the last 6 months, there should be a post-donation blood count confirming normal haemoglobin before jumping or instructing above 8,000ft. Alternatively, they can jump and instruct at up to 8,000ft without a blood count, provided they are asymptomatic and at least 48hrs have passed since donation.

Organ transplantation itself is not a major risk provided the candidate is otherwise well, fully recovered from the procedure and a shorter period of certification is considered. Long term steroid treatment as part of immunosuppression may affect the likelihood of osteoporosis and fracture. This is acceptable if the candidate is aware of, and accepts, this risk.

Active or poorly controlled haemophilia, ITP, other bleeding disorders or use of anticoagulants may increase the risk of haemarthrosis, haematoma, extensive bruising or other significant haemorrhage even in the course of a normal skydive. They may exacerbate simple injuries and also increase the risk of a skydiver succumbing to an otherwise survivable injury. They are usually an unacceptable risk.

Serious infectious disease transmittable by normal social interaction is unacceptable for instructional activity. Blood borne serious infections which could be transmitted while giving or receiving first aid or resuscitation will be acceptable only after special arrangements to mitigate this risk. Please discuss with the Association's medical adviser.

Increasing age often brings a combination of risk factors. Any one of these on its own might seem acceptable, but a combination of a number of individually acceptable risks may still amount to an unacceptable overall level of risk, particularly when supervision of student skydivers is concerned.

VALIDITY

Age at issue under 45 years	-	up to 10 years (but never past 50 th birthday).
Age at issue 45 – under 65 years	-	up to 5 years (but never past 66 th birthday).
Age at issue 65 years and over	-	1 year.

provided that the examining doctor can specify a shorter period of validity if they feel it appropriate.