

## TISSUE DONOR SELECTION GUIDELINES

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### Important Notice

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This copy is in all respects identical to the version released as:

**Tissue Donor Selection Guidelines**

**Edition 02, Release 03**

with the only modification being the addition of this page identified as page 0.

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The content of this document has not been updated since 09 August 2002. However, changes to the selection criteria have occurred since that date. It is the responsibility of the user / issuer to ensure the latest changes are adhered too. Any such changes have been communicated through the issue of Concessionary Letters. All issued Concessionary Letters are published on the JPAC web site (<http://www.transfusionsguidelines.org.uk/index.asp?Publication=DL>)

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## **TISSUE DONOR SELECTION GUIDELINES**

### **Introduction**

This document provides guidance for the selection of donors of tissues and unrelated cord blood. It includes the conditions that apply to both live surgical donors mostly of surgical bone but also explanted valve donations and tissue donations from cadaver tissue donors. It includes some tissue specific exemption criteria. It also covers donations from unrelated cord blood donors but consideration of bone marrow or peripheral blood stem cells or of related cord blood are not within the scope of this document.

There are few absolute contraindications for donation and individual cases may need expert local advice to evaluate the suitability of some donations, for example donors with specific infections. There are a number of absolute contraindications as follows:

- Children from parents with known behavioural risk or children born to mothers with HIV or hepatitis infection unless these infections can definitely be excluded in the child.
- Children less than 18 months of age who are born with or at risk from HIV infection or who have been breast fed within the last 12 months regardless of their HIV test results. However children more than 18 months of age born to mothers with, or at risk from, HIV infection who have not been breast fed within the last 12 months or whose HIV antibody tests, physical examination and review of medical records do not indicate evidence of HIV infection can be accepted as donors
- Uncontrolled severe/systemic infection.
- Malignancy in any location except basal cell carcinoma of the skin and insitu carcinoma of the cervix if these have been treated.
- Systemic autoimmune diseases.
- Creutzfeldt-Jakob Disease (and vCJD) or familial risk of prion disease
- Donors with evidence of viral hepatitis.
- Diseases of unknown aetiology including neurological degenerative disorders.
- In the case of cord blood, a family history of a genetic disorder affecting the bone marrow, immune system or of a metabolic disease must be considered in addition to the above criteria.

- Some infectious diseases may be transmitted from the mother to the infant donor of cord blood or other tissues or cells. In the case of HIV and hepatitis the infant's risk of these viral diseases may be determined by the mother's history and for this reason the mother's medical and behavioural history must be taken as a surrogate for the infant's history. Some genetic disorders of the haematological or immune or metabolic systems may not be obvious at the time of birth and reasonable enquiry after donation should be made as to whether the infant has subsequently been known to develop any of these conditions. Similarly, a family history is pertinent in this regard. The donor mother should be provided with a contact telephone number at the unrelated cord or tissue bank so that post donation information relevant to the use of the donated material can be given .

The criteria are entered alphabetically. Some conditions are referred to by several names and are cross-referenced to each other. There are sub-sections on vaccinations, orthopaedic conditions and infections and each of these is independently alphabetically listed

At the back of the document are listings of malaria and Chagas disease endemic areas.

The document must be read in conjunction with Part 5, Chapter 21, "Selection of Donors" in the UKBTS/NIBSC Guidelines for Blood Transfusion Services which lists the general and some specific aspects of donor selection. It should also be read in conjunction with Part 6, which lists some specific aspects pertaining to haemopoietic progenitor cells.

The ultimate responsibility for the policy for the selection of tissue and unrelated cord blood donors lies with the designated registered medical practitioner (equivalent to the medical director according to the Department of Health (DoH) Code of Practice). Due regard must be given to ensure that confidentiality of the donor is maximised and that consent is appropriately obtained in every case. It is the responsibility of the designated registered medical practitioner to ensure the donor selection criteria are in line with the current Code of Practice requirements.

Counselling and advice must be available for all donors or for their family members if there is information relevant to their health. Where appropriate referral for further medical follow-up and assessment should also be made available.

<b>ACHONDROPLASIA</b>	Accept, but not for structural bone
<b>ACUPUNCTURE</b>	Accept if performed by a medically registered practitioner or by staff in an NHS establishment or by an acupuncturist registered with the Council of Acupuncture or the Acupuncture Association of Chartered Physiotherapists on the production of a valid certificate. See <i>Appendix 1</i> . Otherwise accept if >12 months prior to retrieval of tissue or to the post quarantine testing.
<b>ADDICTION - DRUGS</b>	Previous use of non-parenteral drugs does not necessarily require deferral, but bear in mind the possibility that the history given by such donors regarding the abuse of drugs may be unreliable and may indicate high risk activity with respect to HIV and hepatitis infection.  Permanently defer anyone who has ever injected drugs.
<b>AGE</b>	Different age criteria apply for different tissues. <b>Bone</b> Where biomechanical strength is a requirement bone should be retrieved from donors under 50 years of age. <b>Tendons</b> should be retrieved from donors between the ages 18-55 years. This is due to the fact that the biomechanical properties of tendons deteriorate with age. <b>Costal cartilage</b> should be retrieved from donors between the ages of 10-40 years. <b>Cardiovascular tissue</b> can be retrieved from new-born donors (more than 32 weeks gestation) up to 60 years of age. <b>Skin</b> donations can be retrieved from donors of all ages. <b>Cord blood</b> maternal age must be 17 years or older, in accordance with the rules for blood donors.
<b>AIDS/HIV</b>	<b>Action :</b> All potential donors must be provided with information so that those at risk, can refrain from donation (see Appendix 2) Tissue must not be donated if : <ul style="list-style-type: none"> <li>• The donor or partner are HIV positive</li> <li>• The donor is a Hepatitis B carrier</li> <li>• The donor is a hepatitis C carrier</li> <li>• The donor is a man who has ever had oral or anal sex with other men, even if a condom or other protective was used</li> <li>• The donor has ever received money or drugs for sex</li> <li>• The donor has ever injected, or been injected with drugs (including body building drugs), even a long time ago or only once.</li> </ul> Note: the donor may be able to donate if a doctor prescribed the drugs. Tissue must not be donated if in the past year the potential donor has had sex with (even if a condom or other protective was used):

	<ul style="list-style-type: none"> <li>• A partner who is, or thought to be: HIV positive A hepatitis B carrier A hepatitis C carrier</li> <li>• (if the donor is a woman): a man who has ever had sex with another man even if they used a condom or other protective</li> <li>• A partner who has ever received money or drugs for sex</li> <li>• A partner who has ever injected or been injected with drugs, even a long time ago or only once</li> </ul> <p>Note : the donor may be able to donate if a doctor prescribed the drugs.</p> <ul style="list-style-type: none"> <li>• A partner who has, or is thought to have been, sexually active in parts of the world where HIV/AIDS is very common. This includes most countries in Africa.(There are exceptions)</li> </ul> <p>Tissue must not be donated if the donor thinks he/she needs a test for HIV or Hepatitis or if the donor has had sex in the past year with someone who may be HIV or Hepatitis positive.</p>
<b>ALCOHOLISM</b>	Accept tissues from donors with a history of alcohol abuse but consider co-existing disorders and examine bone pre processing for its suitability as the quality of bone may be reduced .See also :cirrhosis
<b>ALTERNATIVE THERAPY</b>	Needs individual assessment by Designated Registered Medical Practitioner. Donors undergoing “alternative therapies” should be questioned about the details of the therapy and accepted or withdrawn according to the principles of these guidelines. In general, therapies involving penetration by needles should carry appropriate deferral periods.
<b>ANAEMIA</b>	<p><b>Deficiency anaemia:</b> accept but consider underlying cause especially in men.</p> <p><b>Inherited anaemia:</b></p> <ul style="list-style-type: none"> <li>• <b>Cord blood:</b> exclude if mother homozygous. Accept if mother heterozygous (trait) only if foetus/infant is tested for relevant condition.</li> <li>• <b>Bone:</b> assessment by Designated Registered Medical Practitioner for bone donation if homozygous (e.g. thalassaemia / sickle cell) :</li> <li>• <b>Other tissues:</b> accept</li> </ul> <p>See also: Blood Transfusion. See also: elliptocytosis, hereditary spherocytosis sickle cell, thalassaemia.</p>
<b>ANKYLOSING SPONDYLITIS</b>	Exclude if a multi-system disease.

<b>ANTIBIOTICS</b>	Accept if donor infection is localised or under control, but not affecting tissue to be retrieved. Antibiotic therapy is not itself a reason to exclude donations. Each case needs individual assessment by the Designated Registered Medical Practitioner. In general, where antibiotic therapy has been given for 48 hours with no signs of current active infection, consideration may be given to accepting the donation.
<b>ANTIFUNGALS</b>	Underlying condition may debar. Individual assessment required by Designated Registered Medical Practitioner
<b>ARTHRITIS</b>	Exclude inflammatory/auto-immune arthritis of unknown cause, including rheumatoid arthritis, systemic lupus erythematosus, polyarteritis nodosa.  Osteoarthritis is not a contra-indication to bone donation
<b>ARTHROPOD (TICK)-BORNE ENCEPHALITIDES</b>	Accept after full recovery.
<b>AUTO-IMMUNE DISEASES</b>	Need for individual case assessment regarding auto-immune diseases. In general accept single system disease but not multi-system disease – refer to Designated Registered Medical Practitioner for evaluation.
<b>AVASCULAR NECROSIS OF THE FEMORAL HEAD</b>	Exclude for femoral head donations.
<b>BABESIOSIS</b>	Exclude permanently.
<b>BASAL CELL CARCINOMA</b>	Accept if treated and fully recovered.
<b>BISEXUALS</b>	Male: exclude Female sexual partners: exclude for 12 months from last sexual contact.
<b>BLEEDING DISORDERS</b>	See Haemophilia and AIDS <i>Appendix 2</i> .
<b>BLOOD TRANSFUSION</b> This includes red cells, platelets, fresh frozen plasma, cryoprecipitate and intravenous immunoglobulin.	<ul style="list-style-type: none"> <li>· <b>Live donors:</b> Check that underlying medical condition does not exclude the donor.</li> </ul> <p>Accept if no other contra-indication provided at least 12 months have elapsed prior to retrieval of tissue or to the post quarantine testing.</p> <ul style="list-style-type: none"> <li>· <b>Cadaver donors:</b> A history of blood transfusion in the preceding 12 months should not exclude a donor although evidence of the reason for transfusion should be sought.</li> <li>· <b>Cord blood:</b> Exclude maternal donors who have been transfused in the 12 months prior to donation including before and during delivery. In the case of post partum haemorrhage requiring transfusion the validity of the sample must be ensured by applying the appropriate algorithm for possible plasma dilution.</li> </ul> <p>If a pre-transfusion sample is not available, tissue banks must employ an algorithm incorporating the timing, nature and volume of the fluids infused; the donors own blood volume as well as any blood loss, to assess any resultant plasma dilution. Samples of blood estimated to be more than 50% dilute are not suitable for testing.</p>

	See <i>Appendix 4</i> for calculation of plasma dilution. Recipients of albumin or intra-muscular immunoglobulin may be accepted if underlying medical condition does not exclude the donor.
<b>BORRELIOSIS</b>	Accept when fully recovered.
<b>BRAIN SURGERY</b>	Exclude. Exceptions: Burr hole surgery and surgery carried out in Western Europe, North America, Australia or New Zealand after August 1992 may be accepted, provided the reason for the surgery is not itself a reason for exclusion. The donor may also be accepted if it can be shown that dura mater was not used during surgery See also spinal surgery.
<b>BRAIN TUMOURS</b>	Accept only if shown histologically to be benign. See <i>Cancer and Brain surgery</i> .
<b>BREAST LUMP/BIOPSY</b>	See <i>Cancer</i> .
<b>BRONCHITIS (ACUTE/CHRONIC)</b>	Accept if localised controlled infection.  Distinguish frank suppurative pneumonia from focal changes following ventilation, with hypostatic, mild inflammatory changes. The distinction may not be easy without post-mortem information and the Designated Registered Medical Practitioner may need to consider each case individually.
<b>BRUCELLOSIS</b>	Permanently exclude.
<b>BRUCELLOSIS CONTACT</b>	Accept 6 months after contact providing donor has developed no symptoms of infection.
<b>CANCER</b>	Adults with a history of a solid malignant tumour, if diagnosed before the age of 5 years, can be accepted if there is no history of recurrence after initial diagnosis. Donors with a history of childhood leukaemia/lymphoma cannot be accepted.  Patients with carcinoma in situ of the cervix can be accepted as donors, when their course of treatment has proved successful. The diagnosis and evidence of cure must be confirmed.  Treated rodent ulcer (Basal Cell Carcinoma): accept.  Squamous cell carcinoma: Exclude  Brain tumours: Accept primary brain tumours only if shown to be benign histologically. See: <i>Brain Surgery</i> .  Breast lump/biopsy: Accept if histology benign, exclude if malignant.  Otherwise all diseases of malignant origin are a cause for permanent exclusion.

	Cancer therapy often involves immunosuppressive therapy which may require additional testing of the donor. Individual assessment is required by the Designated Registered Medical Practitioner.
<b>CANNABIS</b>	Accept if donor not under the effect of the drug at time of medical questioning and or consent. See also Drug Abuse.
<b>CARDIAC SURGERY</b>	<b>Cardiovascular tissue</b> donors with a history of previous cardiac valve surgery need individual evaluation by the Designated Registered Medical Practitioner See also: SBE.
<b>CARDIOMYOPATHY</b>	Accept unless there is evidence of active myocarditis, which excludes tissue donation. Screening for chlamydia, coxiella and enteroviruses (Triple C) is generally unhelpful with the possible exception of infants dying of fulminant neonatal enterovirus infection.
<b>CENTRAL NERVOUS SYSTEM DISEASE</b>	Exclude CNS disease of viral or suspected infective origin, e.g. multiple sclerosis or Creutzfeldt-Jakob disease (CJD). Neurodegenerative conditions of unknown aetiology including Parkinson's Disease and Dementia's are not acceptable. See also epilepsy; brain surgery
<b>CERVICAL CONE BIOPSY or CERVICAL CARCINOMA IN SITU (OR CERVICAL DYSPLASIA)</b>	See Cancer.
<b>CHAGAS DISEASE (SOUTH AMERICAN TRYPANOSOMIASIS)</b>	Permanently exclude. Donors at increased risk of Chagas Disease are also permanently excluded. These are, people who: a) were born in South America or Central America (including Southern Mexico) or b) whose mother was born in these countries or c) had a blood transfusion in these countries or d) have lived and/or worked in rural subsistence farming communities in these countries for a continuous period of 4 weeks or more.  Donors at increased risk may be accepted if a validated test for T.Cruzi is negative at least 6 months following the date of last exposure See <i>Appendix 3</i> .
<b>CHICKEN POX</b>	<b>Cord blood</b> : exclude if maternal donor has had chicken pox during the index pregnancy. <b>Other tissues</b> : accept after complete recovery.
<b>CHICKEN POX CONTACT</b>	Accept if donor has had Chicken Pox. If not, accept after 4 weeks if infection free.
<b>CHOLECYSTITIS</b>	Accept. <b>Cord blood</b> : check family history of haemolytic anaemia e.g. spherocytosis
<b>CHRISTMAS DISEASE</b>	See Haemophilia.



<b>CIRRHOSIS</b>	Individual assessment by Designated Registered Medical Practitioner required. Exclude Infectious and autoimmune causes and concurrent hepatoma Genetic causes accept. Note: Associated malabsorption may affect the quality of bone See also : Alcoholism
<b>CHONDROMALACIA</b>	Accept
<b>COAGULATION FACTOR CONCENTRATES</b>	See Haemophilia.
<b>COELIAC DISEASE</b>	Accept.
<b>COLITIS / ULCERATIVE COLITIS</b>	Exclude donors with inflammatory bowel disease.
<b>COLOSTOMY</b>	May be acceptable depending on aetiology. Check with Designated Registered Medical Practitioner. Exclude if colostomy was performed for malignancy or for inflammatory bowel disease.
<b>“CONE” BIOPSY</b>	See Cancer.
<b>CONTRACEPTIVE PILL</b>	Accept.
<b>CORNEAL TRANSPLANT</b>	Exclude re risk of Creutzfeldt-Jakob Disease (CJD).
<b>CORONARY THROMBOSIS</b>	Accept for most tissues but <u>may be</u> unacceptable for heart valves.
<b>CREUTZFELDT-JAKOB DISEASE (CJD)</b>	Exclude donors with CJD, variant CJD (vCJD) or other prion associated disorder. Exclude individuals identified at higher risk of developing a prion associated disorder. They include: a) Recipients of dura mater grafts b) Recipients of corneal or scleral grafts c) Recipients of human derived pituitary hormones/extracts d) Individuals at familial risk of prion associated diseases. This includes individuals who have had two or more blood relatives develop a prion-associated disease and individuals who have been informed they are at risk following genetic counselling.  See also Corneal Transplant, Growth Hormone, Hormone Therapy, Infertility Treatment, Pituitary Extracts and Brain Surgery.
<b>CROHN'S DISEASE</b>	Exclude.
<b>CYSTITIS</b>	Accept when fully recovered or if on prophylactic antibiotics and the urine culture is negative.
<b>CYTOMEGALOVIRUS</b>	<b>Cord blood</b> : exclude if infection in index pregnancy.
<b>DEEP VENOUS THROMBOSIS</b>	Accept.
<b>DEMENTIA</b>	Exclude.
<b>DENGUE FEVER</b>	Accept when fully recovered.
<b>DENTAL TREATMENT</b>	Accept unless there is evidence of infection.
<b>DERMATITIS</b>	Structurally damaged skin is unacceptable for skin donation. <b>Cord blood:</b> exclude if maternal donor has severe perineal infected dermatitis.

DIABETES INSIPIDUS	Accept if aetiology does not preclude.
DIABETES MELLITUS	Accept. Ensure there is no occult infection.
DIARRHOEA	Accept at least 24 hours after full recovery.
DILATION & CURETTAGE (D&C)	Accept if no malignancy. See also: Cancer
DIPHTHERIA	Accept 4 weeks after full recovery.
DIVERTICULITIS	Accept.
DROWNING	Skin must not be retrieved from anyone who has drowned by immersion. Cardiovascular tissues may only be obtained from donors who have drowned if the immersion was less than 12 hours.
DRUG ABUSE	Permanently exclude anyone who has ever injected drugs including body-building drugs. Previous abuse of non-parenteral drugs does not debar <b>BUT</b> bear in mind the possibility that the history given by such donors regarding the abuse of drugs may be unreliable and may indicate high risk activity with respect to HIV infection. See <u>Appendix 2</u> .
DRUG TREATMENT	The taking of some drugs may indicate an underlying disease, which would make a donor ineligible. Obtain further clinical information and discuss with Designated Registered Medical Practitioner. <b>Cord blood</b> : drugs with known haematological toxicity e.g. carbamazepine assess individually.
DUODENAL ULCER	Accept if benign.
DYSPLASIA OF THE HIP	Accept.
EAR/BODY PIERCING	Accept if >12 months prior to retrieval of tissue or to the post quarantine testing.
ECZEMA	Accept . Skin must not be retrieved from affected areas. See also : dermatitis.
ELECTROLYSIS	Accept.
ELLIPTOCYTOSIS	Elliptocytosis is a common but genetically heterogeneous disorder. Each case therefore needs individual assessment with expert advice.
EMPHYSEMA	Accept.
ENCEPHALITIS	Accept when fully recovered.
ENDOMETRIOSIS	Accept.
EPILEPSY	Epilepsy is not in itself a contra-indication to tissue donation. Consider aetiology and discuss with Designated Registered Medical Practitioner. See also: Brain Tumours/Surgery. <b>Cord blood</b> :Exclude if maternal donor is taking drugs with known haematological toxicity.
ETRETINATE (TIGASON)	Exclude.
FEBRILE EPISODES	Exclude unless cause is fully established including travel abroad, and donor meets all the necessary criteria. Consider malaria if episode occurred during or after a visit to a malarial area. See also: Malaria
FIBROIDS – REMOVAL	Accept if benign.
FILARIASIS	Exclude.
FITS	See Epilepsy.
FOOD POISONING, DIARRHOEA, D&V	See Diarrhoea.

<b>FOREIGN TRAVEL</b>	See <a href="#">Appendices 2 and 3</a> and entries on Chagas Disease and Malaria for specific details. It should be ascertained whether donors had visited or lived abroad other than in Western Europe, North America, Australia or New Zealand. Travel shall mean stop-overs, short term visits, long term visits and residence of any duration.
<b>FUNGAL INFECTION OF NAILS</b>	Accept.
<b>G6PD DEFICIENCY</b>	<b>Cord blood</b> : if there is a relevant family history, only accept if donation is tested for this condition. Homozygous deficiency in maternal donor is reason to exclude.
<b>GALL BLADDER DISEASE or OPERATION</b>	See also: Cholecystitis. See also: Operations. Accept if no malignancy. See also: blood transfusion.
<b>GASTRECTOMY/ GASTRIC OPERATION</b>	Accept if no malignancy. See also: blood transfusion.
<b>GASTRO-INTESTINAL DISEASE</b>	Accept single system disease of auto-immune aetiology e.g. Coeliac Disease. Exclude multisystem autoimmune disease, malignant or inflammatory bowel disease, e.g. Crohn's Disease or Ulcerative Colitis.
<b>GENITAL HERPES</b>	Accept if lesions are healed and donor off all treatment, provided there is no history of other sexually transmitted disease. <b>Cord blood:</b> exclude if infected during index pregnancy.
<b>GERMAN MEASLES (RUBELLA)</b>	<b>Tissues:</b> Accept if fully recovered. <b>Cord blood:</b> Exclude if infection occurred during index pregnancy.
<b>GERMAN MEASLES CONTACT</b>	<b>Tissues</b> : Accept. <b>Cord blood:</b> Accept only if mother has known rubella immunity
<b>GIARDIASIS</b>	Accept because this is a local intestinal infection.
<b>GILBERT'S DISEASE</b>	Accept.
<b>GOITRE</b>	Accept if benign. See Thyroid disease.
<b>GONORRHOEA</b>	Accept if >12 months after the end of treatment. Note that the donor may be at risk of other sexually transmitted infections. Check that live donors have fully understood the High Risk exclusion criteria - <a href="#">Appendix 2</a> .
<b>GOUT</b>	Accept if no malignant aetiology.
<b>GRAND MAL</b>	See Epilepsy.
<b>GRANULOMA INGUINALE</b>	Exclude.
<b>GROWTH HORMONE</b>	Exclude recipients of pituitary derived <b>human</b> growth hormone (usually prior to 1987). Accept if received recombinant growth hormone only. It is essential to determine the type of growth hormone received prior to accepting the donor. See also CJD, Hormone Therapy, Pituitary Extracts
<b>GUILLAIN-BARRÉ SYNDROME</b>	Confirm diagnosis. Accept if it can be confirmed as a typical monophasic Guillain Barré Syndrome that has recovered completely within one year, and a further two years have elapsed without any recurrence of symptoms.

<b>HAEMATOLOGICAL DISEASE</b>	<p>Exclude viral, immune or potentially malignant conditions.</p> <p>All malignant haematological conditions including polycythaemia rubra vera (but not secondary polycythaemia) and essential thrombocythaemia are a reason for permanent exclusion. Generally refer to Designated Registered Medical Practitioner</p> <p><b>Cord blood:</b> For mother with inherited haematological disorders – see anaemias.</p>
<b>HAEMATURIA</b>	<p>Accept if no malignancy or current uncontrolled infection.</p>
<b>HAEMOGLOBIN DISORDERS</b>	<p>Confirm diagnosis. Those with abnormal haemoglobin traits may be acceptable. See also Sickle Cell Trait, Thalassaemia</p>
<b>HAEMOPHILIA (including relative, carrier, Christmas Disease, von Willebrand's Disease)</b>	<p>Accept providing the individual has not received coagulation factor concentrates of human origin (after appropriate enquiries have been made from the local Haemophilia Centre Director and/or family doctor).</p> <p><b>Sexual contacts</b> of haemophiliacs in above exclusion category are not acceptable until one year after the last sexual contact.</p> <p><b>Family members</b> of haemophiliacs may be accepted providing they have not had a needlestick injury when helping with the administration of coagulation factor concentrates. See also: Hepatitis.</p>
<b>HAND, FOOT AND MOUTH DISEASE</b>	<p>Accept when fully recovered.</p> <p><b>Cord blood:</b> Exclude if infection occurred during the index pregnancy.</p>
<b>HEAD INJURY</b>	<p>See also: brain surgery.</p>
<b>HEAF TEST</b>	<p>Accept if no active Tuberculosis.</p>
<b>HEALTH CARE WORKERS</b>	<p>Accept workers in hospital laboratories or caring for people with hepatitis or other infectious agents provided they have not suffered an inoculation injury or contamination of non-intact skin or mucosa with blood from the individual.</p> <p>Workers who have received an inoculation injury from an infected individual should not be accepted until 1 year after injury. Obtain a full history and discuss with the Designated Registered Medical Practitioner.</p> <p>Inoculation injury with material containing abnormal prions are not acceptable.</p> <p>Note: Inoculation injury includes the contamination of non intact skin or mucosa with blood/secretions or injuries caused by machines, tools or parts thereof, which may be contaminated with blood or blood products.</p>

<p><b>HEART ATTACK, HEART OPERATION, HEART CONDITION</b></p>	<p>Generally acceptable. Needs individual assessment by Designated Registered Medical Practitioner. If there is a known valve lesion, exclude subacute bacterial endocarditis (SBE) or endocarditis due to other infective agents. May be unsuitable for valve donation.</p> <p>See also Cardiomyopathy, Myocarditis Operations and Blood Transfusion.</p>
<p><b>HEPATITIS</b></p>	<p>Hepatitis has a number of causes including viral infection and drug hypersensitivity. Our concern is with viral hepatitis.</p> <p>Individuals who have suffered other forms of hepatitis, once fully recovered, may be acceptable as tissue donors, but consult Designated Registered Medical Practitioner.</p>
<p><b>1. Hepatitis of Viral Origin Type unknown</b></p> <p>a) Risk Factors</p> <p>b) Health Care Workers and Other Professionals</p> <p>c) Other contacts</p>	<p>History of childhood jaundice/hepatitis (&lt;12 years old) now fully recovered – accept.</p> <p>History of jaundice/hepatitis while adult (&gt;12 years) :</p> <ul style="list-style-type: none"> <li>· If more than 2 years after recovery - accept unless known to be a carrier for hepatitis B or C.</li> <li>· If less than 1 year after recovery - defer for 1 year.</li> <li>· Between 1 and 2 years after recover – Anti-HBc is performed. If negative the donor may be accepted. If confirmed positive anti-HBs is performed. The donor may be accepted if the individual is HbsAg negative &gt;100 iu/l of anti-HBs can be demonstrated.</li> </ul> <p>All procedures where there is a possibility of transmission of infection through infected blood or sexual activity with an infected individual :</p> <p>These are covered in the appropriate headings in these A-Z guidelines. See also <u>Appendix 2</u>.</p> <p>Workers in hospital laboratories or caring for people with hepatitis, provided they have not suffered an inoculation injury or contamination of non-intact skin or mucosa with blood from an individual infected with hepatitis : Accept Workers who have received an inoculation injury from an individual infected with hepatitis should be deferred for 1 year but obtain a full history and discuss with Designated Registered Medical Practitioner.</p> <p>History of contact with jaundice/hepatitis (known or suspected to be due to a specific hepatitis virus): Household/family contact : Accept 1 year after index illness.</p> <p>Sexual contact : see entry under relevant virus.</p>

<p><b>2. Hepatitis A</b> Established infection</p> <p>Sexual partners of confirmed cases</p> <p>Vaccine recipients</p> <p>Recipients of normal human immunoglobulin (e.g. travellers abroad)</p>	<p>Accept 1 year after recovery.</p> <p>Accept 1 year after recovery of partner.</p> <p>Accept if there has been no known exposure incident.</p> <p>Exclude a donor with a known exposure unless 6 weeks have passed and the donor has developed no symptoms.</p> <p>Although normal human immunoglobulin given prophylactically prior to foreign travel does not in itself merit exclusion of the tissue donor, the country visited may do so. See <u>Appendix 3</u>.</p>
<p><b>3. Hepatitis B</b> Carriers/established infection</p> <p>Donors with a history of HBV</p> <p>Recipients of vaccine</p> <p>Recipients of HBV Immunoglobulin (HBIG)</p> <p>Sexual partners of confirmed carriers</p>	<p>Permanently exclude.</p> <p>Obtain a full history and refer to the Designated Registered Medical Practitioner. Donors with a specific history of Hepatitis B should not be accepted until 12 months have passed from time of recovery. In addition they should have HbsAg, anti-HBc and anti-HBs performed.</p> <p>Only accept if all markers are negative or HBsAg negative, anti HBc positive and anti HBs present at &gt;100 iu/L(0.1iu/ml, 100m iu/ml).</p> <p>Accept after 48 hours if there has been no donor exposure incident. Accept if the vaccination was given after an incident, which occurred more than 1 year before retrieval or date of re-test.</p> <p>Hepatitis B immunoglobulin administered after a known exposure (with or without the vaccine) can prolong the incubation period.</p> <p>Confirm the reason for administration and exclude the donor unless 1 year has elapsed.</p> <p>Obtain full history and discuss with Designated Registered Medical Practitioner</p> <p>Such donors are acceptable provided the donor is considered to be naturally immune, i.e. they have anti-HBc and anti-HBs level is &gt;100 iu/l, at some time.</p> <p>If sexual contact has ceased for at least 12 months, accept if both HBsAg and anti-HBc are negative. If anti-HBc is positive, the donor is acceptable only if the anti-HBs is &gt;100 iu/l at some time.</p>

<p><b>4. Hepatitis C</b></p> <p>Seropositive individuals and individuals with documented past infection</p> <p>Sexual partners of HCV seropositive individuals</p>	<p>Exclude</p> <p><b>Current partners</b> – exclude.  <b>Previous partners</b> - accept if more than a year after last sexual contact.</p>
<p><b>HERPES SIMPLEX</b></p>	<p><b>Cord Blood:</b> Exclude if primary systemic infection occurred during index pregnancy.</p>
<p><b>HERPES (GENITAL)</b></p>	<p>Accept if lesions are healed and donor off all treatment, provided there is no history of other sexually transmitted disease.  <b>Cord blood:</b> Not acceptable if infected during index pregnancy.</p>
<p><b>HIV ANTIBODY POSITIVE INFECTION</b></p>	<p>Exclude - see AIDS <u>Appendix 2</u>.</p>
<p><b>HOMEOPATHY</b></p>	<p>Homeopathy in itself is not a reason for deferral. Assess underlying condition and see appropriate entry.</p>
<p><b>HOMOSEXUALS</b></p>	<p>Males permanently exclude.  Females accept.</p>
<p><b>HORMONE THERAPY</b></p> <p>Tumour Chemotherapy  Infertility Treatment</p> <p>Growth Hormone</p> <p>Menopausal symptoms or osteoporosis prevention  Pituitary extracts</p>	<p>Ascertain which hormone and the underlying condition. In the case of pituitary hormones it is essential to determine if the hormone was <b>human</b> derived (usually before 1987) or whether it was genetically engineered. Exclude if history of treatment with human derived hormone.  Exclude.  Exclude those who have received Human Gonadotrophin of pituitary origin (available by injection between 1956 and 1985 in certain treatment centres). Exclude recipients of <b>human</b> pituitary derived Growth Hormone - see also Creutzfeldt-Jakob Disease (CJD). Accept even if on hormone replacement therapy (HRT).  Exclude recipients of <b>human</b> derived pituitary extracts before 1987 (including TSH and ACTH) – See also: Creutzfeldt-Jakob Disease (CJD).</p>
<p><b>HOSPITAL STAFF</b></p>	<p>There is no evidence to suggest that hospital staff involved in caring for AIDS/Hepatitis patients or working in hospital laboratories are at any greater risk with respect to HIV or Hepatitis than the general public. Accept 12 months after an inoculation injury or contamination of non-intact skin or mucous membrane with blood from an infected individual, but discuss with Designated Registered Medical Practitioner. See also: Hepatitis.</p>
<p><b>HUNTINGTON'S CHOREA</b></p>	<p>Accept if diagnosis confirmed. Consult with Designated Registered Medical Practitioner</p>
<p><b>HYDATID DISEASE</b></p>	<p>Exclude permanently.</p>

<b>HYDROCEPHALUS</b>	Accept if there is no evidence of shunt infection. Consult Designated Registered Medical Practitioner. See also: Brain Surgery.
<b>HYPERTENSION</b>	<b>Tissues:</b> Accept. <b>Cord Blood :</b> Exclude if severe hypertension in pregnancy. Consult with Designated Registered Medical Practitioner.
<b>HYPERTHYROIDISM</b>	Accept if single system disease, and a malignant cause is excluded. <b>Cord Blood :</b> Accept unless on drugs with known haematological toxicity. See also : Radionucleotides
<b>HYPOTHYROIDISM</b>	Accept. See also : Radionucleotides
<b>HYSTERECTOMY</b>	Accept if no malignancy, and blood transfusion. See also: Operations, Blood transfusion.
<b>IDIOPATHIC THROMBOCYTOPENIC PURPURA (ITP)</b>	Accept 5 years following complete recovery providing there has been no recurrence and donor has been discharged from follow up. This applies to both adult and childhood disease.
<b>ILEOSTOMY</b>	May be acceptable depending on aetiology. Check with Designated Registered Medical Practitioner. Exclude if performed for a malignant condition or for inflammatory bowel disease.
<b>IMMUNODEFICIENCY</b>	Exclude donors with inherited or acquired immunodeficiency. <b>Cord blood:</b> Family history of immunodeficiency discuss with Designated Registered Medical Practitioner.
<b>IMMUNOGLOBULIN THERAPY</b>  a) Recipients of normal human immunoglobulin (e.g. travellers abroad)  b) Recipients of HBV Immunoglobulin (HBIg)	Accept, unless travel excludes See <u>Appendix 3</u>  Hepatitis B immunoglobulin administered after a known exposure (with or without the vaccine) can prolong the incubation period. Confirm the reason for administration and exclude donor unless 1 year has elapsed.
<b>IMMUNOSUPPRESSION</b>	Donors who are or were immunosuppressed at any time discuss with Designated Registered Medical Practitioner.
<b>INFECTION (TROPICAL)</b>	Exclude permanently: Babesiosis Chagas Disease ( South American Trypanosomiasis) Filariasis Hydatid disease Leishmaniasis (Kala Azar) Schistosomiasis (Bilharzia) Sleeping sickness (African Trypanosomiasis) Yaws  Exclude for 12 months from recovery of illness or return to the UK: Congo fever Crimean fever



	<p>Ebola fever                  Lassa fever                  Marburg fever                  Accept when fully recovered:                  Arthropod(tick) borne encephalitides                  Dengue fever                  Sandfly fever                  Yellow fever</p>
<b>INFERTILITY TREATMENT</b>	<p>Exclude those who have received Human Gonadotrophins of Pituitary origin (available in injectable format between 1956 and 1985 in certain treatment centres).</p>
<b>INHERITED DISEASE e.g. Gauchers Disease / Cystic fibrosis</b>	<p>Refer to Designated Registered Medical practitioner.                  See also : individual haemolytic anaemias as the same principles apply.</p>
<b>INOCULATIONS</b>	<p>See: Vaccinations.</p>
<b>INOCULATION INJURY</b>	<p>History of inoculation injury or contamination of mucosa or non intact skin with blood or body fluids: should only be accepted 12 months after the date of the incident.                  History of inoculation injury with material containing abnormal prions- permanently exclude.</p>
<b>INJECTED DRUGS OF MISUSE (including body building drugs)</b>	<p>Permanently unfit – see Drug Abuse.                  Check these donors understand the AIDS exclusion criteria See Appendix 2</p>
<b>IRRITABLE BOWEL</b>	<p>Accept.</p>
<b>ISOTRETINOIN (ROACCUTANE)</b>	<p>Exclude if this drug taken within the previous month.</p>
<b>JAUNDICE</b>	<p>Accept if due to Gilberts disease, neonatal jaundice or gall stone disease  <b>CORD BLOOD</b> : Consider haemolytic anaemia as a cause of gall stones in the mother                  See also : hepatitis.</p>
<b>KALA AZAR (SYSTEMIC LEISHMANIASIS)</b>	<p>Exclude.</p>
<b>KIDNEY DISEASE</b>	<p>Accept local or controlled infection.                  Immune causes of renal disease need individual consideration by the Designated Registered Medical Practitioner.                  Acute Nephritis – Single attack glomerulonephritis may be acceptable.                  Chronic Nephritis – Exclude.</p>
<b>KIDNEY DONOR</b>	<p>Accept living (usually) related donor.</p>
<b>KIDNEY RECIPIENT</b>	<p>See organ donation/transplantation.</p>
<b>LAMINECTOMY</b>	<p>Accept for non-malignant aetiology.</p>
<b>LASER THERAPY</b>	<p>Laser therapy is not in itself a reason for exclusion but the underlying condition may be. Discuss with Designated Registered Medical Practitioner</p>
<b>LEGIONNAIRE'S DISEASE</b>	<p>Accept when fully recovered.</p>
<b>LEISHMANIASIS</b>	<p>Exclude permanently</p>
<b>LEPTOSPIROSIS</b>	<p>Accept when fully recovered.</p>
<b>LESBIANS</b>	<p>Accept.</p>

<b>LEUKAEMIA</b>	Exclude.
<b>LISTERIOSIS</b>	<b>Cord Blood:</b> Exclude if infection in index pregnancy
<b>LYMES DISEASE (Borreliosis)</b>	Accept when fully recovered.
<b>LYMPHOGRANULOMA VENEREUM</b>	Exclude
<b>MALARIA</b>	<p>Donors are not acceptable if they have ever been diagnosed with malaria or have had an undiagnosed febrile illness, which may have been malaria, while abroad or within 4 weeks of return to the UK from a malaria endemic area.</p> <p>Donors are acceptable if 5 years have passed following each return to the UK if they were resident in a malaria endemic area.</p> <p>A malaria area resident is someone who has lived in any of the countries of sub-Saharan Africa or Papua New Guinea for a continuous period of 6 months at any time of life.</p> <p>Donors are acceptable if 12 months have passed following each return to the UK from a malaria endemic area.</p> <p>Note . Donors may be acceptable if a validated test for malaria antibody is negative at least 6 months following date of last potential exposure or date of recovery from symptoms.</p> <p>See Appendix 3 for countries with and without risk of malaria</p>
<b>MALARIA CONTACT IN UK</b>	Accept.
<b>MALIGNANT DISEASES</b>	See Cancer.
<b>MANTOUX TEST</b>	Accept if investigation complete and no active infection. See also: Tuberculosis.
<b>MARFAN'S SYNDROME</b>	Accept bone for non structural use and cord blood. Exclude heart valves, skin, tendons and structural bone.
<b>MASTECTOMY</b>	See Cancer.
<b>MEASLES</b>	Accept when full recovered. <b>Cord blood:</b> Exclude if infection acquired in index pregnancy.
<b>MEASLES CONTACT</b>	<b>Tissues:</b> Accept if individual has had measles. Exclude for 4 weeks after contact if donor has not. <b>Cord blood:</b> Accept only if mother has known measles immunity.
<b>MEDICATION/DRUGS</b>	<p>Exclude donors taking drugs which are proven or potentially teratogenic (eg Vitamin A derivatives) or who are taking drugs which accumulate in tissues over long periods. Check with Designated Registered Medical Practitioner.</p> <p>The taking of some drugs may indicate an underlying disease that would make the donor ineligible to donate. See Etretnate and Tigason</p> <p>Some drugs may be present in such small amounts in tissues that they may be irrelevant for the recipients and some tissues have drugs, particularly antibiotics added during processing eg heart valves, as a routine that</p>

## Tissue Donor Selection Guidelines

	these drugs are not considered relevant unless the recipient has some particular potent hypersensitivity. Their presence is indicated on the labelling of such grafts.
<b>MENIERE'S DISEASE</b>	Accept.
<b>MENINGITIS</b>	Individual assessment by Designated Registered Medical Practitioner and Microbiology advisor required.
<b>MULTIPLE SCLEROSIS</b>	Exclude.
<b>MUMPS</b>	<b>Tissues:</b> Accept when fully recovered <b>Cord blood:</b> Exclude if infection occurred during index pregnancy
<b>MUMPS CONTACT</b>	<b>Tissues:</b> Accept if individual has had mumps. Exclude for 4 weeks if donor has not. <b>Cord blood:</b> Accept only if mother has known mumps immunity
<b>MUSCULAR DYSTROPHY (genetic)</b>	Accept for bone but if donor has osteoporosis use only for non structural purposes. Heart valves: May not be suitable for valves in view of association of cardiomyopathy with some muscular dystrophies.
<b>MYALGIC ENCEPHALOMYELITIS (ME)</b>	Accept when fully recovered. <b>Cord blood:</b> Accept if not during index pregnancy and fully recovered.
<b>MYOCARDITIS</b>	Exclude if evidence of active myocarditis Screening for chlamydia, coxiella and enteroviruses (Triple C) is generally unhelpful with the possible exception of infants dying of fulminant neonatal enterovirus infection.
<b>MYOMECTOMY</b>	Accept if non malignant aetiology.
<b>MYXOEDEMA</b>	Accept.
<b>NEEDLESTICK INJURY</b>	See under Health Care Workers and Haemophilia Family members.
<b>NEOTIGASON</b>	Exclude unless 12 months after completion of treatment.
<b>NEPHRECTOMY</b>	Accept if non malignant aetiology.
<b>NEPHRITIS</b>	See Kidney Disease.
<b>NEUROFIBROMATOSIS (von Recklinghausen's Disease)</b>	Accept if no associated malignancy.
<b>NEUROLOGICAL CONDITIONS</b>	Exclude donors with neuro-degenerative disease or disease of unknown aetiology (e.g. Parkinson's Disease; Multiple Sclerosis).
<b>NIGHT SWEATS</b>	Obtain more information to establish aetiology before accepting. Consult with Designated Registered Medical Practitioner.
<b>OPERATIONS</b>	Accept if the operation was not for a malignancy. If transfused see also: Blood Transfusion. See also Brain Surgery.
<b>ORF (CONTAGIOUS PUSTULAR DERMATITIS)</b>	Accept after full recovery.

<p><b>ORGAN DONATION/ TRANSPLANTATION</b></p>	<p>In the case of a tissue donor who has been a live (usually related) organ donor, commonly of a kidney, accept if other criteria are met.</p> <p>Tissue donors, must meet the following criteria:</p> <p><b>Organ recipients as simultaneous donors of organs:</b> Domino donors are patients who receive heart-lung transplants and then donate their heart to another patient. An assessment of any infection risk needs to be carried out and, domino donors should be tested in the same way as other donors for mandatory markers at 180 days post donation. Nucleic acid testing should supplement antibody tests due to immunosuppression at the time of the second sample.</p> <p><b>Organ recipients as donors of tissues:</b> Patients who have received an organ transplant are not acceptable for tissue donation.</p> <p><b>Tissue recipients as donors of organs and tissues:</b> The situation is comparable to receipt of a blood transfusion except for recipients of dura mater or ocular tissue who are ineligible for donation. For other tissue recipients, donation may be considered one year following the transplant as long as the donors are not immunosuppressed.</p> <p><b>Autologous transplants:</b> If the material to be transplanted can be stored the donor should undergo testing as for an allogeneic donor.</p>
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<b>ORTHOPAEDIC CONDITIONS</b>	These are of particular relevance to bone donation.
Achondroplasia	Accept for non-structural bone.
Avascular Necrosis of the hip	Exclude for femoral head donation.
Dysplasia of the hip	Accept.
Intra-articular steroid injection	Accept if infection can be excluded.
Osteomalacia Osteomyelitis	Exclude for bone donation. Affected tissues not suitable for bone donation. Other tissues may be acceptable provided there is no residual focus of bone infection.
Osteoporosis	Bone for weight bearing purposes should be selected from donors with low risk of osteoporosis.
Pagets Disease	Exclude - the aetiology is unknown but possibly viral.
Perthes Disease	Accept.
Polymyalgia Rheumatica	Exclude.
Rheumatoid Arthritis	Exclude.
Tuberculosis of the hip	Exclude for hip bone donation.
<b>OSTEOARTHRITIS</b>	Accept.
<b>OSTEOMYELITIS</b>	Affected tissues not suitable for bone donation. Other tissues may be acceptable provided there is no residual focus of bone infection.
<b>OSTEOPOROSIS</b>	Bone for weight bearing purposes should be selected from donors with low risk of osteoporosis
<b>PAGETS DISEASE</b>	Exclude - the aetiology is unknown but possibly viral.
<b>PEPTIC ULCER</b>	Accept if non-malignant.
<b>PERICARDITIS</b>	Accept when fully recovered.
<b>PERITONSILLAR ABSCESS</b>	Accept after full recovery.
<b>PERTHES DISEASE</b>	Accept.
<b>PERITONITIS</b>	Accept when fully recovered. Exclude underlying pathology.
<b>PETIT MAL</b>	See Epilepsy/Cancer.
<b>PITUITARY EXTRACTS</b>	Recipients of <b>human</b> derived pituitary extracts usually before 1987 (including TSH and ACTH), exclude. See Creutzfeldt-Jakob Disease (CJD). Recipients of Human Growth Hormone are permanently excluded. Accept if only received recombinant derived hormones.

<b>PLASMA DILUTION</b>	If a pre-transfusion sample is not available, tissue banks must employ an algorithm incorporating the timing, nature and volume of the fluids infused; the donors own blood volume as well as any blood loss, to assess any resultant plasma dilution. Samples of blood estimated to be more than 50% dilute are not suitable for testing. See Appendix 4 for calculation of plasma dilution.  See also: Blood Transfusion
<b>PLEURISY</b>	Check underlying disease and exclude malignancy. Accept when fully recovered and off all antibiotics.
<b>PNEUMONIA</b>	Accept when fully recovery. See also: Pleurisy.
<b>PNEUMOTHORAX</b>	Accept unless an infective cause.
<b>POLIO CONTACT</b>	Accept if immune or >4 weeks if this is unknown.
<b>POLYMYALGIA RHEUMATICA</b>	Exclude.
<b>POST VIRAL FATIGUE SYNDROME (MYALGIC ENCEPHALOMYELITIS/ ME)</b>	Accept when fully recovered. <b>Cord blood</b> : Accept if not during index pregnancy and fully recovered
<b>PRISONS</b>	Cadaver donations exclude if donor was imprisoned in the preceding 12 months. Accept living donations provided all other criteria are met.
<b>PROCTITIS</b>	Exclude. See also: Ulcerative Colitis.
<b>PROSTATECTOMY</b>	Exclude a malignant aetiology. See also: Operations.
<b>PROSTITUTES</b>	Permanently exclude. See Appendix 2.
<b>PSORIASIS</b>	Mild: Accept if no systemic infection, systemic treatment or associated arthropathy. Exclude if treated with: Acitretin (Neotigason) within previous 12 months Roaccutane (Isotretinoin) within previous 4 weeks Etretnate (Tigason) ever.
<b>PULMONARY EMBOLISM</b>	Accept unless associated with malignancy.
<b>PYELONEPHRITIS</b>	See Kidney Disease.
<b>PYRUVATE KINASE DEFICIENCY</b>	<b>Cord blood</b> : If there is a relevant family history, only accept if donation is tested for this condition. Exclude homozygous donors.
<b>PYREXIA</b>	See Febrile Episodes.
<b>Q FEVER</b>	Donors who have recovered from Q fever with negative Coxiella burnetti titres may be suitable for tissue donations. Cardiac tissues must be examined for any irregularities.
<b>QUINSY</b>	Accept after full recovery.
<b>RADIATION THERAPY</b>	Individual assessment of underlying condition and field of exposure-usually exclude. Even if radiation therapy was localised, bone exposed will not be suitable for use.
<b>RADIONUCLEOTIDES</b>	Individual assessment by Designated registered medical practitioner required. In general those used for diagnostic reasons are totally clear within 24hours. Some e.g. radioactive iodine have long half lives and such donors should not be accepted unless at least 6 months have passed. Always assess the underlying diagnosis.

<b>RAYNAUDS SYNDROME</b>	Accept.
<b>RELAPSING FEVERS/ BORRELIOSIS</b>	Accept when fully recovered. <b>Cord blood:</b> Exclude if infection occurs during index pregnancy.
<b>RETINITIS PIGMENTOSA</b>	Accept.
<b>RHEUMATIC FEVER</b>	A donor with a history of rheumatic fever or rheumatic valvular disease is not acceptable for donating heart valves. Other tissues including vessels may be acceptable but exclude bacterial endocarditis.
<b>RHEUMATOID ARTHRITIS</b>	Exclude. See also: Arthritis.
<b>ROACCUTANE (ISOTRETINOIN)</b>	Accept if 1 month after last dose.
<b>RODENT ULCER</b>	See Cancer.
<b>RUBELLA</b>	<b>Tissues:</b> Accept if fully recovered. <b>Cord blood:</b> Exclude if infection occurred during index pregnancy.
<b>RUBELLA CONTACT</b>	<b>Cord blood :</b> Exclude unless maternal donor has proven immunity to rubella
<b>SALPINGITIS</b>	Accept after full recovery.
<b>SARCOIDOSIS</b>	Acute Respiratory Sarcoidosis – Accept only if the attack was short and mild and the donor is fully recovered for a period of 2 years. Chronic Sarcoidosis – exclude, even if very low grade clinically.
<b>SCHISTOSOMIASIS</b>	Accept when fully recovered.
<b>SEMI-PERMANENT MAKE-UP</b>	This is a form of Tattooing. Accept if >12 months prior to retrieval of tissue or to the post quarantine testing.
<b>SEX CHANGE (GENDER REASSIGNMENT)</b>	Individual assessment required by Designated registered medical practitioner. Acceptance or deferral depends on lifestyle and at risk behaviour.
<b>SHINGLES</b>	Does not necessarily exclude but will depend on site of rash. Skin from site of rash not acceptable. This is not a systemic infection. Consider associated illnesses and extent of shingles rash. <b>Cord blood:</b> Exclude if infection occurred during index pregnancy
<b>SHINGLES CONTACT</b>	Accept if donor is immune. Otherwise wait 4 weeks.
<b>SICKLE-CELL DISEASE</b>	Individual assessment required by Designated registered medical practitioner. Donors with Sickle Cell Disease not suitable for bone donation with a history of bone crises. If transfused – see entry under Blood Transfusion. <b>Cord blood donors:</b> see anaemia
<b>SICKLE-CELL TRAIT</b>	Accept.
<b>SKIN CANCERS</b>	See Cancer.

<b>SKIN DISEASE</b>	<p>The following points should be considered before deciding whether to accept a tissue donor.</p> <ol style="list-style-type: none"> <li>1. If the skin disease is contagious does it present a risk of infection to the recipients?</li> <li>2. Does the skin disease affect the site of skin or other tissue retrieval or blood sampling?</li> <li>3. Is the skin disease a manifestation of underlying disease?</li> <li>4. Is the donor on treatment or medication, which might affect the tissue donation?</li> </ol> <p>It is best to have an evaluation by the .Designated Registered Medical Practitioner</p>
<b>SLEEPING SICKNESS (AFRICAN TRYPANOSOMIASIS)</b>	Exclude.
<b>SPHEROCYTOSIS</b>	See anaemias.
<b>SPINAL SURGERY FOR TUMOUR OR CYST</b>	<p>Exclude if before August 1992.          Before this date human dura mater (tissue covering the brain) was used in neurosurgical procedures. Burr hole surgery-accept.          The donor may be accepted if it can be shown that dura mater was not used during surgery.          See also: Brain Surgery.</p>
<b>SPLENECTOMY</b>	Establish underlying cause. If for malignancy defer. Accept for other conditions. If transfused see also: Blood Transfusion. See also ITP.
<b>SQUAMOUS CELL CARCINOMA</b>	Exclude.
<b>STEROIDS</b>	<p>Individual assessment required. Steroids are not necessarily a reason to exclude a donor. Donors on regular steroid treatment may not be acceptable for structural bone or for skin allografts.</p> <p>Intra-articular steroid injection is not a contra-indication to bone donation but exclude infection.</p>
<b>STROKE</b>	Accept.
<b>SUBACUTE INFECTIVE ENDOCARDITIS(SBE)</b>	Cardiovascular tissues should not be retrieved from tissue donors with a history of endocarditis. Ensure there is no focus of infection in the retrieved tissues.
<b>SUICIDE or ATTEMPTED SUICIDE</b>	Individual assessment required by designated registered medical practitioner. Generally accept for tissue donations, but the mode of death may be a contraindication.
<b>SURGERY</b>	In general, exclude only if for malignancy or serious infection at the time of tissue donation. If transfused see entry under Blood Transfusion. See also Brain Surgery.
<b>SYPHILIS</b>	Exclude.
<b>SYPHILIS SEXUAL CONTACT</b>	Accept after 12 months if all blood tests negative. Take special note of high risk behaviour. See <i>Appendix 2</i> .
<b>SYSTEMIC LUPUS ERYTHEMATOSIS (SLE)</b>	Individual assessment required. Active multi systemic disease - Exclude.



<b>TAMOXIFEN</b>	If for prophylactic use exclude for as long as individual is receiving treatment. If taken for malignant disease-exclude permanently.
<b>TATTOO</b>	Accept if >12 months prior to retrieval of tissue or to the post quarantine testing. Note that semi-permanent make-up is a form of tattooing.
<b>TEMPORAL ARTERITIS</b>	See Polymyalgia Rheumatica.
<b>THALASSAEMIA MAJOR</b>	Individual assessment by Designated Registered Medical Practitioner required. Exclude if transfusion dependent.
<b>THALASSAEMIA TRAIT</b>	Accept. <b>Cord blood</b> : see anaemia
<b>THREADWORMS</b>	Accept even if on treatment.
<b>THROMBOSIS</b>	Accept but exclude underlying malignancy.
<b>THRUSH</b>	Individual evaluation by Designated Registered Medical Practitioner. Exclude if underlying immunodeficiency and/or on systemic treatment within last 7 days.
<b>THYROID DISEASE</b>	Accept but exclude a malignant cause. See also: radionucleotides
<b>THYROXINE</b>	Accept if underlying condition does not debar.
<b>TICK-BORNE ENCEPHALITIDES</b>	Accept when fully recovered.
<b>TIGASON</b>	Exclude. See also: Psoriasis.
<b>TOXOPLASMOSIS</b>	Accept 6 months after recovery. Consider underlying immunodeficiency. <b>Cord blood</b> : Maternal recovery must be before index pregnancy and shown to be IgM negative
<b>TRAUMA</b>	Significant trauma in particular penetrating trauma requires evaluation by the Designated Registered Medical Practitioner. If the donor is accepted the rationale must be documented.
<b>TRAVEL/TROPICAL AREAS</b>	See Foreign Travel.
<b>TRIGEMINAL NEURALGIA</b>	<b>Cord blood:</b> Exclude if taking carbamazepine
<b>TROPICAL DISEASES</b>	See under specific diseases listed and obtain more information.
<b>TRYPANOSOMIASIS CRUZI</b>	See Infection - Chagas Disease.
<b>TUBERCULOSIS (HIP)</b>	Unacceptable for hip bone donation.
<b>TUBERCULOSIS (PULMONARY)</b>	Accept donors 2 years after successful completion of treatment. Take special care for high risk behaviours. For BCG, Heaf and Mantoux tests, see under respective entries.
<b>TURNER'S SYNDROME</b>	Accept.
<b>TYPHOID FEVER</b>	Exclude permanently.
<b>ULCERATIVE COLITIS AND PROCTITIS</b>	Exclude even if mild and responsive to treatment.
<b>URETHRITIS (Non Specific)</b>	Accept when fully recovered. Consider risks associated with sexually transmitted diseases.
<b>URINARY TRACT INFECTION</b>	Accept if no systemic symptoms. See also: Cystitis – Infection.

<b>VACCINATIONS AND IMMUNISATIONS</b>	Accept recipients of killed vaccines, e.g. <b>Anthrax, Cholera, Genital Herpes, Influenza, Meningitis, Typhoid, Diphtheria.</b> Accept recipients of live vaccinations if >4 weeks from vaccination, e.g. <b>MMR, Measles, Mumps, Rubella, Yellow Fever, BCG.</b>
Hepatitis A vaccination	Accept if there has been no known exposure incident. Exclude a donor with a known exposure unless 6 weeks have passed and the donor has developed no symptoms.
Hepatitis B vaccination	Accept after 48 hours if there has been no donor exposure incident. Accept if the exposure incident occurred more than 1 year before retrieval or date of retest.
Rabies Immunisation	Accept non-exposed individuals (i.e. Customs & Excise, Vets, etc.) Exposed individuals not acceptable unless >1 year post exposure.
Tetanus Immunisation	Accept but if given for injury, details of the injury, which required immunisation should be obtained in case this contra-indicates donation. <b>Active vaccine</b> – accept. <b>Passive vaccine (immunoglobulin)</b> - accept after a minimum of 4 weeks.
BCG	Accept after 4 weeks or until inoculation site has healed.
<b>VIRAL DISEASES</b>	Exclude individuals with any active and/or chronic diseases which may be viral in origin, or whose basis is unknown.
<b>VIRAL HAEMORRHAGIC FEVERS (Lassa, Ebola, Marburg, Congo/Crimean)</b>	Confirm diagnosis. Exclude for 1 year following recovery from illness or return to the UK if episode occurred abroad prior to donation.
<b>VITAMIN TABLETS/ PRESCRIBED INJECTIONS</b>	Accept.
<b>VITILIGO</b>	Accept if not part of an active multi-system disease.
<b>VON RECKLINGHAUSEN'S-DISEASE (NEUROFIBROMATOSIS)</b>	Accept if no associated malignancy.
<b>VON WILLEBRAND'S DISEASE</b>	See Haemophilia.
<b>WARTS</b>	Accept if skin warts on local treatment only.
<b>WHOOPING COUGH</b>	Accept >4 weeks post recovery.
<b>YELLOW FEVER</b>	Accept when fully recovered.
<b>YAWS</b>	Exclude.

**For all medical conditions not currently listed in this document, full details should be recorded and referred to the Designated Registered Medical Practitioner**

**APPENDIX 1 -**

**(A) ACUPUNCTURE - Live Donors**

Eligibility of tissue donors undergoing acupuncture and sample certificates from :

- Council of Acupuncture (i)
- Association of Chartered Physiotherapists (ii)

**(B) ACUPUNCTURE - CADAVER/MULTIORGAN DONORS**

It may not be possible in every instance to have the above mentioned certificates. However, as much information as possible should be obtained, to enable the Designated Registered Medical Practitioner to decide on the acceptability of the donation and the reason for this decision must be fully documented.

**(i) ACUPUNCTURE AND TISSUE DONATION - LIVE DONORS**

Enquiries are often made by clients who consider themselves otherwise fit about whether tissue donations from people who have recently received acupuncture are acceptable. After careful discussions between acupuncturists and doctors in the British Blood Transfusion Services, it has been agreed that there is no reason for acupuncture *in itself* to prevent people from donating tissues, as long as it is administered by a competent and professionally registered practitioner. However, the condition for which acupuncture is being given may be a reason for not accepting a donation.

Certificate for Tissue Donors who have recently received Acupuncture therapy

(Acceptable for one year from date of signature)

THIS NOTICE CONFIRMS THAT

*name, address and  
telephone number\*  
of acupuncturist*

is currently a Registered Practitioner with  
which is a member of the Council for Acupuncture;

*name of association*

and administered a course of acupuncture therapy to

*client's full name and address*

signed            *Acupuncturist*            on            *date*

**\*note - Acupuncturist must enter the telephone number above.**

It is understood that although recent acupuncture *in itself* does not stop people from donating tissue, the condition for which acupuncture is being given, or indeed other medical conditions, may be a reason for not accepting a donor.

**(ii) ACUPUNCTURE AND TISSUE DONATION - LIVE DONORS**

Enquiries are often made by clients who consider themselves otherwise fit about whether tissue donations from people who have recently received acupuncture are acceptable. After careful discussions between acupuncturists and doctors in the British Blood Transfusion Services, it has been agreed that there is no reason for acupuncture *in itself* to prevent people from donating tissues, as long as it is administered by a competent and professionally registered practitioner. However, the condition for which acupuncture is being given may be a reason for not accepting a donation.

Certificate for Tissue Donors who have recently received Acupuncture therapy

(Acceptable for one year from date of signature)

THIS NOTICE CONFIRMS THAT

*name, address and  
telephone number\*  
of acupuncturist*

Currently a Registered Practitioner of Acupuncture with the Association of Chartered Physiotherapists; administered a course of acupuncture therapy to

*client's full name and address*

signed                      *Acupuncturist*                      on                      *date*

**\*note - Acupuncturist must enter the telephone number above.**

It is understood that although recent acupuncture *in itself* does not stop people from donating tissue, the condition for which acupuncture is being given, or indeed other medical conditions, may be a reason for not accepting a donor.

## **APPENDIX 2 - HIGH RISK EXCLUSION CRITERIA**

All potential donors must be provided with information so that those at risk refrain from donating. Tissue Bank Co-ordinators/Nurses must ensure that all potential donors do not fall into any of the following criteria .

### ***Tissue must not be donated if :***

1. You, or your partner, are HIV positive.
2. You are a Hepatitis B carrier.
3. You are a Hepatitis C carrier.
4. You are a man who has ever had oral or anal sex with other men, even if you used a condom or other protective.
5. You have ever received money or drugs for sex..
6. You have ever injected, or been injected with drugs (including body building drugs), even a long time ago or only once.  
(you may be able to donate if a doctor prescribed the drugs)

### ***Tissue must not be donated if in the past year the potential donor has had sex with (even if a condom or other protective is used):***

1. A partner who is, or you think may be:
  - HIV positive
  - A hepatitis B carrier
  - A hepatitis C carrier
1. (if you are a woman): a man who has ever had oral or anal sex with another man even if they used a condom or other protective.
2. A partner who has ever received money or drugs for sex.
3. A partner who has ever injected or been injected with drugs; even a long time ago or only once (you may be able to donate if a doctor prescribed the drugs).
4. A partner who has, or you think may have been, sexually active in parts of the world where HIV/AIDS is very common. This includes most countries in Africa. (there are exceptions)

Tissue must not be donated if the donor thinks he/she needs a test for HIV or Hepatitis.

In the case where direct questioning is not possible, the above information must be obtained from the most appropriate sources to ensure that the most reliable answers are obtained. This may include the donor's next of kin and/or his/her General Practitioner or other sources, ensuring as far as is possible donor confidentiality.

APPENDIX 3

Travel Abroad

**T. cruzi** Trypanosoma cruzi (South American Trypanosomiasis)  
See: Chagas' disease.

**Malaria** Epidemiological details are given for all countries with malarious areas, geographical and seasonal distribution. Many countries have one or more areas which have "little" risk of malaria and will be seen as clear areas on the WHO based maps. For reasons of safety the text has been entered as "whole country" where no easily applied guidelines can be given. These countries have also been marked with (\*) (From International Travel and Health, WHO 2000).

For the countries marked in this list with (\*), where the maps/written guidelines are insufficiently detailed, the session officer should assess whether the donor was at risk from malaria by establishing whether or not he/she was **advised** to take anti-malarial tablets.

Country	T. cruzi	Malaria	Malaria Resident Criteria	
Afghanistan	No	Yes	May-November.	
Albania	No	No		
Algeria	No	Yes (*)	Illizi Dept. only (isolated and access difficult).	
American Samoa	No	No		
Andorra	No	No		
Angola	No	Yes	all year in whole country	Yes
Antigua	No	No		
Argentina	Yes	Yes (*)	All year in rural areas along border with Bolivia and Paraguay only.	
Armenia	No	Yes (*)	Some rural villages in Ararat valley, June - October. No risk in tourist areas.	
Australia	No	No		
Austria	No	No		
Azerbaijan	No	Yes (*)	All year in southern areas	
Azores	No	No		
Bahamas	No	No		
Bahrain	No	No		
Bangladesh	No	Yes	all year in whole country except Dhaka City	
Barbados	No	No		
Belarus	No	No		
Belgium	No	No		

## Tissue Donor Selection Guidelines

Country	T. cruzi	Malaria	Malaria Resident Criteria
Belize	Yes	Yes	all year in whole country
Benin	No	Yes	all year in whole country
Bermuda	No	No	
Bhutan	No	Yes (*)	all year in southern part of country
Bolivia	Yes	Yes (*)	all year ,rural areas along border with Brazil and Paraguay.
Bosnia and Herzegovina	No	No	
Botswana	No	Yes (*)	November-May/June - in northern areas.
Brazil	Yes	Yes (*)	all year in rural areas in Amazon river area
British Virgin Islands	No	No	
Brunei Darussalam	No	No	
Bulgaria	No	No	
Burkina Faso	No	Yes	all year in whole country
Burma (Myanmar)	No	Yes (*)	March - December, whole country
Burundi	No	Yes	all year in whole country
Cambodia(Kampochea)	No	Yes	all year in whole country
Cameroon	No	Yes	all year in whole country
Canada	No	No	
Cape Verde Sao	No	Yes (*)	September-November in Tiago Island
Canary Islands	No	No	
Cayman Islands	No	No	
Central African Republic	No	Yes	all year in whole country
Chad	No	Yes (*)	all year in whole country apart from far North
Chile	Yes	No	
China	No	Yes(*)	All year, whole country except in Heilongjing, Jilin, Nei Monggol, Gansu, Beijing, Shanxi, Ningxai, Qinghai, Xinjiang (except along valley of Yili river) and Xizang (except along valley of Zangbo river in extreme SE)
Christmas Island	No	No	
Colombia	Yes	Yes (*)	all year in rural / jungle areas
Comoros	No	Yes	all year in whole country
Congo	No	Yes	all year in whole country
Cook Islands	No	No	



## Tissue Donor Selection Guidelines

Country	T. cruzi	Malaria	Malaria Resident Criteria	
Costa Rica	Yes	Yes (*)	all year in rural areas of Alajuela, Guanacaste, Limon and Puntarenas Prov.	
Cote D'Ivoire	No	Yes	all year in whole country	Yes
Croatia	No	No		
Cuba	No	No		
Cyprus	No	No		
Czech Republic	No	No		
Democratic Republic of Congo [ex Zaire]	No	Yes	all year in whole country	Yes
Denmark	No	No		
Djibouti	No	Yes	all year in whole country	Yes
Dominica	No	No		
Dominican Republic	No	Yes	all year in whole country	
East Timor	No	Yes	all year in whole country	
Ecuador	Yes	Yes (*)	all year in lowland provinces of El Oro, Esmeraldas, Guayas, Los Rios, Manabi, Morona, Santiago, Napo, Pastaza, Pinchancha, Sucumbios and Zamora Chinchipe	
Egypt	No	Yes (*)	June-October in El Faiyum area	
El Salvador	Yes	Yes (*)	all year in rural areas bordering Guatemala	
Equatorial Guinea	No	Yes	all year in whole country	Yes
Eritrea	No	Yes (*)	all year in whole country except Asmara	Yes
Ethiopia	No	Yes	all year in whole country except Addis Ababa	Yes
Estonia	No	No		
Falkland Islands	No	No		
Faroe Islands	No	No		
Fiji	No	No		
Finland	No	No		
France	No	No		
French Guiana	Yes	Yes	all year in whole country	
Gabon	No	Yes	all year in whole country	Yes
Gambia	No	Yes	all year in whole country	Yes

## Tissue Donor Selection Guidelines

Country	T. cruzi	Malaria	Malaria Resident Criteria	
Georgia	No	Yes (*)	July - October South-Eastern parts of country	
Germany	No	No		
Ghana	No	Yes	all year in whole country	Yes
Gibraltar	No	No		
Greece	No	No		
Greenland	No	No		
Grenada	No	No		
Guadeloupe	No	No		
Guam	No	No		
Guatemala	Yes	Yes (*)	all year in lowland areas	
Guinea	No	Yes	all year in whole country	Yes
Guinea-Bissau	No	Yes	all year in whole country	Yes
Guyana	Yes	Yes	all year in whole country	
Haiti	No	Yes (*)	all year in suburban and rural areas	
Honduras	Yes	Yes	all year in whole country	
Hong Kong	No	No		
Hungary	No	No		
Iceland	No	No		
India	No	Yes (*)	all year excluding parts of states of Himachal Pradesh, Jammu, Kashmir and Sikkim	
Indonesia	No	Yes (*)	all year in whole country except in Jakarta, big cities and the tourist resorts of Java and Bali	
Iran	No	Yes (*)	March-November in provinces of Sistan-Baluchestan, Hormozgan and Kerman (tropical part), but also in parts of provinces of Bakhtaran, Bushehr, Chahar Mahal, Fars, Ilam, Khuzestan, Kohkiluyeh and Lorestan	
Iraq	No	Yes (*)	May-November in lowland areas of the North	
Ireland	No	No		
Israel	No	No		
Italy	No	No		

## Tissue Donor Selection Guidelines

Country	T. cruzi	Malaria	Malaria Resident Criteria
Ivory Coast	See Cote D'Ivoire		
Jamaica	No	No	
Japan	No	No	
Jersey	No	No	
Jordan	No	No	
Kampuchea	See Cambodia		
Kazakhstan	No	No	
Kenya	No	Yes	all year in whole country. Yes
Kiribati	No	No	
Korea (N & S)	No	Yes (*)	Border area between North and South Korea
Kuwait	No	No	
Kyrgyzstan (Kirghizia)	No	No	
Lao (Laos)	No	Yes (*)	all year in whole country except Vientiane.
Latvia	No	No	
Lebanon	No	No	
Lesotho	No	No	
Liberia	No	Yes	all year in whole country Yes
Libya	No	No	
Lichtenstein	No	No	
Lithuania	No	No	
Luxembourg	No	No	
Macao	No	No	
Macedonia	No	No	
Madagascar	No	Yes	all year in whole country Yes
Madeira	No	No	
Malawi	No	Yes	all year in whole country Yes
Malaysia	No	Yes (*)	only in rural areas and Sabah, not in urban or coastal regions
Maldives	No	No	
Mali	No	Yes (*)	all year in whole country except North Yes
Malta	No	No	
Marshall Islands	No	No	

## Tissue Donor Selection Guidelines

Country	T. cruzi	Malaria	Malaria Resident Criteria
Martinique	No	No	
Mauritania	No	Yes (*)	all year in whole country except North
Mauritius	No	Yes (*)	all year in rural areas
Mayotte	No	Yes	all year in whole country
Mexico	Yes	Yes (*)	some rural areas. No risk in coastal areas.
Micronesia	No	No	
Monaco	No	No	
Mongolia	No	No	
Montserrat	No	No	
Morocco	No	Yes (*)	May-October in some rural areas. No risk around Mediterranean Sea or tourist resorts.
Mozambique	No	Yes	all year in whole country
Myanmar	See Burma		
Namibia	No	Yes (*)	November-May/June in North, all year along Kavango River.
Nauru	No	No	
Nepal	No	Yes (*)	all year in rural areas of Terai districts (including forests)
Netherlands	No	No	
Netherland Antilles	No	No	
New Caledonia and Dependencies	No	No	
New Zealand	No	No	
Nicaragua	Yes	Yes	all year in whole country
Niger	No	Yes	all year in whole country except North
Nigeria	No	Yes	all year in whole country
Niue	No	No	
N Mariana Islands	No	No	
Norway	No	No	
Oman	No	Yes (*)	all year in far North only
Pacific Islands Trust of USA	No	No	
Pakistan	No	Yes	all year in whole country
Panama	Yes	Yes	all year in whole country
Papua New Guinea	No	Yes	all year in whole country

## Tissue Donor Selection Guidelines

Country	T. cruzi	Malaria	Malaria Resident Criteria	
Paraguay	Yes	Yes (*)	all year along Northern border with Bolivia	
Peru	Yes	Yes (*)	all year in Eastern and Northern areas	
Philippines	No	Yes (*)	No risk in urban areas or in the plains	
Pitcairn Islands	No	No		
Poland	No	No		
Polynesia (French)	No	No		
Portugal	No	No		
Puerto Rico	No	No		
Qatar	No	No		
Reunion Islands	No	No		
Romania	No	No		
Russia	No	No		
Rwanda	No	Yes	all year in whole country	Yes
Ryukyu Islands	No	No		
St Helena	No	No		
St Kits and Nevis	No	No		
St Lucia	No	No		
St Pierre and Miquelon	No	No		
St Vincent and Grenadines	No	No		
Samoa	No	No		
San Marino	No	No		
Sao Tome and Principe	No	Yes	all year in whole country	Yes
Saudi Arabia	No	Yes (*)	all year in South-Western areas [except high altitude areas of Asir province ]	
Senegal	No	Yes	all year in whole country	Yes
Seychelles	No	No		
Sierra Leone	No	Yes	all year in whole country	Yes
Singapore	No	No		
Slovakia	No	No		
Slovenia	No	No		
Solomon Islands	No	Yes (*)	all year except in a few Eastern and Southern outlying islets	
Somalia	No	Yes	all year in whole country	Yes

## Tissue Donor Selection Guidelines

Country	T. cruzi	Malaria	Malaria Resident Criteria	
South Africa	No	Yes (*)	all year in low altitude areas of Northern and Eastern Transvaal and Eastern Natal as far south as the Tugela river	
Spain	No	No		
Sri Lanka	No	Yes	all year in whole country except districts of Colombo, Kalutara and Nuwara Eliya	
Sudan	No	Yes	all year in whole country except North	Yes
Suriname	Yes	Yes	all year in whole country	
Swaziland	No	Yes	all year in low veld areas (mainly Big Bend, Mhlume, Simunye and Tshaneni)	Yes
Sweden	No	No		
Switzerland	No	No		
Syrian Arabic Rep	No	Yes (*)	May-October in Northern border areas	
Taiwan	No	No		
Tajikistan	No	Yes (*)	June - October in some Southern border areas	
Tanzania (United Republic of)	No	Yes		Yes
Thailand	No	Yes (*)	all year in rural, especially forested and hilly areas of whole country, no risk in cities and main tourist resorts e.g. Bangkok, Chiangmai, Pattaya, Phuket and Samui	
Togo	No	Yes	all year in whole country	Yes
Tonga	No	No		
Trinidad & Tobago	No	No		
Tunisia	No	No		
Turkey	No	Yes (*)	May - October in South Eastern part of country	
Turkmenistan	No	Yes (*)	June - October in South - Eastern part of country	
Tuvalu	No	No		
Uganda	No	Yes	all year in whole country	Yes
Ukraine	No	No		
United Arab Emirates	No	Yes (*)	in foothill areas and valleys of mountainous regions of Northern Emirates only , no risk in Abu Dhabi, Dubai, Sharjah, Ajman and Umm al Qaiwain	
United Kingdom	No	No		

## Tissue Donor Selection Guidelines

Country	T. cruzi		Malaria	Malaria Resident Criteria
United States of America	No	No		
Upper Volta	see Burkina Faso			
Uruguay	Yes	No		
USSR	These have been included as specific republics			
Uzbekistan	No	No		
Vanuatu (formerly New Hebrides - Oceania)	No	Yes	all year in whole country	
Venezuela	Yes	Yes (*)	all year in rural areas	
Vietnam	No	Yes (*)	all year in whole country except urban centres and the deltas	
Virgin Islands	No	No		
Wake Island	No	No		
Yemen	No	Yes (*)	all year in whole country except Aden and Airport Perimeter	
Yugoslavia	No	No	See Also: individual republics of the Former Yugoslavia	
Zaire	(see Democratic Republic of Congo )			
Zambia	No	Yes	all year in whole country	Yes
Zimbabwe	No	Yes	all year in whole country	Yes

(\*) See explanation under Malaria at the top of this listing.

**Tissue Donor Selection Guidelines**

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APPENDIX 4

**CALCULATION OF PLASMA DILUTION**

\*To be used in cases of significant blood loss

**CRYSTALLOID INFUSED:**

INTERVAL PRIOR TO SAMPLING	VOLUME INFUSED (ml)	% RETAINED	VOLUME RETAINED (ml)
>24 HOURS		0	NONE
2 - 24 HOURS		25	
1 - 2 HOURS		50	
<1 HOUR		75	
<b>TOTAL CRYSTALLOID RETAINED:</b>			

**BLOOD/COLLOID INFUSED:**

INTERVAL PRIOR TO SAMPLING	VOLUME INFUSED (ML)	% RETAINED	VOLUME RETAINED (ml)
24 - 48 HOURS		100 (Blood) 50 (Colloid)	
0 - 24 HOURS		100	
<b>TOTAL BLOOD/COLLOID RETAINED:</b>			

<b>ESTIMATED TOTAL BLOOD VOLUME:</b>	<b>% HAEMODILUTION</b>
<b>70 mls per kilogram of body weight*</b>	$\frac{\text{CRYSTALLOID RETAINED} + \text{BLOOD/COLLOID RETAINED} \times 100}{\text{BLOOD VOLUME}}$

<b>ACCEPT (&lt;50%)/REJECT (&gt;50%)</b>	
<b>SIGNED:</b>	<b>DATE:</b>
COMMENTS: .....	
.....	
.....	

\* In critical care patients, the circulating blood volume is typically 45-60 ml per kg. body weight compared to the normal 70-80 ml. The former figure should be used on such patients.