

Site visit inspection report on compliance with HTA minimum standards

Birmingham Children's Hospital

HTA licensing number 11005

Licensed for the

- procurement, processing, testing, storage, distribution and import/export of human tissues and cells for human application under the Human Tissue (Quality and Safety for Human Application) Regulations 2007; and
- storage of relevant material which has come from a human body for use for a scheduled purpose

3 November 2015

Summary of inspection findings

The HTA found the Designated Individual, the Licence Holder, the premises and the practices to be suitable in accordance with the requirements of the legislation.

Birmingham Children's Hospital (the establishment) was found to have met all HTA standards.

Particular examples of strengths and good practice are included in the concluding comments section of the report, along with advice and guidance on how to improve systems further.

The HTA's regulatory requirements

The HTA must assure itself that the Designated Individual, Licence Holder, premises and practices are suitable.

The statutory duties of the Designated Individual are set down in Section 18 of the Human Tissue Act 2004. They are to secure that:

- the other persons to whom the licence applies are suitable persons to participate in the carrying-on of the licensed activity;
- suitable practices are used in the course of carrying on that activity; and
- the conditions of the licence are complied with.

The HTA developed its licensing standards with input from its stakeholders. They are designed to ensure the safe and ethical use of human tissue and the dignified and respectful treatment of the deceased. The HTA inspects the establishments it licences against four groups of standards:

- consent
- governance and quality systems
- premises facilities and equipment
- disposal.

This is an exception-based report: only those standards that have been assessed as not met are included. Where the HTA determines that a standard is not met, the level of the shortfall is classified as 'Critical', 'Major' or 'Minor' (see Appendix 2: Classification of the level of shortfall). Where HTA standards are fully met, but the HTA has identified an area of practice that could be further improved, advice is given to the DI.

Reports of HTA inspections carried out from 1 November 2010 are published on the HTA's website.

Licensable activities carried out by the establishment

'E' = Establishment is licensed to carry out this activity.

'E*' = Establishment is licensed to carry out this activity but is not currently carrying it out.

'TPA' = Third party agreement; the establishment is licensed for this activity but another establishment (unlicensed) carries out the activity on their behalf.

Tissue type	Procurement	Processing	Testing	Storage	Distribution
PBSC	E		E/SLA		
вм	E		E/SLA		
Heart Valves	E	E	SLA	E	E/SLA
Iliac Vessels				E	E/TPA
Skin	E		SLA		TPA
Bone			E	E	

Background to the establishment and description of inspection activities undertaken

This report refers to the activities carried out at the Birmingham Children's Hospital. The establishment is licensed for the procurement, testing, processing, storage and distribution of human tissues and cells under the Human Tissue (Quality and Safety for Human Application) Regulations 2007. It is also licensed for the storage of relevant material which has come from a human body for use for a scheduled purpose under the Human Tissue Act 2004. The establishment has been licensed by the HTA since August 2006 and has been inspected on four previous occasions.

The following activities are undertaken at the establishment:

The Heart Valve Bank (HVB) was established seventeen years ago and is one of three independent heart valve banks. The HVB receives hearts from other HTA-licensed establishments which are responsible for the procurement and donor testing of the tissue. Hearts are obtained from either multi-organ or tissue donors. In the case of multi-organ donors, procurement, from the deceased, is carried out in theatre. For donors classified as tissue donors these are donors that have failed to proceed to full organ donation. Procurement of hearts is carried out in mortuaries by mortuary staff. On the rare occasions when the mortuary staff are unable to carry out the procurement then staff from the HVB will retrieve the heart.

In all cases, a Specialist Nurse for Organ Donation (SN-OD) will seek consent, carry out patient assessment and ensure necessary blood tests are carried out. Donors are tested for the mandatory serological markers set out in Directions 003/2010, and for additional markers such as *Mycobacterium tuberculosis*. A blood sample is also sent to the HVB with each procured heart. Nucleic acid amplification technique (NAT) testing is performed on this blood sample by the NHSBT reference laboratory in Colindale and a formal agreement is in place for the provision of this service. NAT testing includes HIV, Hepatitis B and Hepatitis C. The SN-OD will also contact the National Retrieval Centre (NRC) to arrange for transport of the retrieved heart to the heart valve bank.

The hearts are processed in a dedicated cleanroom facility. Staff, at the HVB, dissect the heart in a Class II microbiological safety cabinet, to remove the aortic and pulmonary valves. The valves are washed, placed in an antibiotic solution and incubated at 37°C for 24 hours. The valves are then transferred to a second Class II microbiological safety cabinet, where they are prepared for cryopreservation. Environmental monitoring in the form of automated non-viable particle counting, settle plates, contact plates and finger dabs takes place throughout processing. Plates and samples for microbiological testing are sent to the bacteriology laboratory within the hospital for analysis. The valves are frozen and stored at temperatures below -150°C in a quarantine liquid nitrogen tank until all donor tests and quality control checks are completed. If the pulmonary valve is unsuitable pulmonary patches are obtained, processed and treated as described above. The remaining heart tissue is stored in a separate freezer for use in research if suitable consent is in place.

The DI reviews all documentation including consent forms, donor testing and environmental monitoring results. If the quality checks have been met, the valves are placed in the release liquid nitrogen tank. The establishment is part of the NHSBT National Fulfilment System (NFS), a national centralised inventory of all heart valve homografts. Heart valves processed at the establishment are used locally and distributed as part of the NFS. Additional heart valves are purchased from NHSBT as required. The establishment also distributes pulmonary valve patches (not included in the NFS system).

- The HVB stores Iliac vessels that have been procured during organ retrieval as part of organ transplant surgery, but not been used during organ implantation. These vessels are used either at the establishment for further surgical procedures within the same organ recipient, or are distributed to other organ transplant centres for use in other organ recipients where further vessels are required. Vessels from each donor are individually packaged and stored in separate containers for up to fourteen days then discarded or used for research if consent is in place.
- Peripheral blood stem cells (PBSCs) and Bone Marrow (BM) are procured in the Oncology and Haematology Departments for autologous and allogeneic transplant use.

The cells are transported to another HTA-licensed establishment which is responsible for donor testing and processing; and when applicable, cryopreservation and storage. The cells are returned to the establishment for subsequent transplantation. For sibling donors aged sixteen to eighteen or adult donors the procurement of PBSCs occurs at another licensed establishment. In the past year, the establishment has carried out twelve autologous and one allogenic PBSC procurements. Bone marrow procurement takes place in one of nine theatres at the establishment and is sent to NHSBT. The bone marrow is not only used in the treatment of leukaemia but for metabolic disorders such as Thalassemia and Haemoglobinopathies.

- Skin biopsies are procured from patients in a specialist theatre within the Burns Unit. The tissue samples are transported to another HTA-licensed establishment which is responsible for donor testing, and the expansion and processing of keratinocytes to an advanced therapy medicinal product (ATMP). The ATMP is returned to the establishment for donor treatment. Only procurement and testing are considered licensable activities under this HTA licence. All other activities are regulated by the Medicines and Healthcare products Regulatory Agency (MHRA). The establishment follows the standard operating procedures of the processing establishment, for the procurement of skin. In the last two years skin for an ATMP has been procured from two patients.
- The HVB also has procedures in place for the storage of cranial flaps. However this procedure is carried out infrequently. In the past year only one cranial flap was stored and has subsequently been disposed of.
- Ocular material in the form of sclera, cornea, amniotic membrane and serum eye drops is stored and distributed by the HVB, for end use.

The establishment has agreements in place with medical transport providers for time critical deliveries, and an agreement with a local taxi service for non time critical deliveries. Tissue transport boxes are appropriate for the tissue types and are validated.

The inspection included a review of documentation relevant to the establishment's activities, a visual inspection of the premises, and interviews with key members of staff.

In the HVB, a traceability audit was conducted on tissue procured from four donated hearts. This included three heart valves and ten pulmonary artery patches. The department's records included all applicable documentation, including: a signed consent for donation form; virology results, processing records, including lot and batch numbers of consumables, controlled rate freezing charts, environmental monitoring data and repeat virology results. Five pulmonary patches derived from one donation failed microbiology testing. These valves were located in the research freezer in accordance with the donor's wishes. Traceability was maintained throughout and no discrepancies were identified in the accompanying documentation.

The traceability audit also included the review of the records for one burns patient who had undergone skin biopsy procurement for subsequent keratinocyte culture. The following information was cross referenced: donor name, date of birth, patient identity number, unique identification number, procurement date, virology testing results, and signed consent forms for procurement, testing and storage. Full traceability was demonstrated and no anomalies were found.

Inspection findings

The HTA found the Designated Individual and the Licence Holder to be suitable in accordance with the requirements of the legislation.

Compliance with HTA standards

All applicable HTA standards have been assessed as fully met.

Advice

The HTA advises the DI to consider the following to further improve practices:

No.	Standard	Advice
1	GQ1(p)	The DI is advised to review the SLA with the licensed establishment that procures adult PBSCs in order to ensure that they are signed and dated.
2	GQ2(b)	Although internal audits are conducted there was no evidence that findings were actioned.
		The DI is advised to work towards formalising the systems used to record any corrective and preventative actions and the progress in implementing them that may have arisen as a result of the audits.
3	GQ2(c)	The DI is advised to check staff training records for completeness.
4	GC2(k)	The HVB has one full time and one part time member of staff. The DI is advised to develop a succession plan for the HVB to ensure adequate cover for on-call rota, leave, unexpected absences and potential retirement.
5	GQ(8a)	The establishment has risk assessments covering activities in the HVB and to a limited extent for PBSC procurement. The DI is advised to expand the risk assessment for procurement (apheresis) and the other activities under the licence, to consider more of the potential risks to the quality and safety of tissue and cells.
6	PFE2(c)	In the last three months intermittent positive environmental swab tests results were obtained for the changing area and the freezer room in the HVB. The DI is advised to review the cleaning agent and frequency of floor washing in the clean room and freezer areas.
7	PFE5(b)	Fridges and freezers in the HVB, used for the storage of ocular reagents and plates for environmental monitoring, are plugged into an extension socket. The cable to the socket is stretched and exposed and may potentially result in equipment failure. To mitigate the risk of equipment failure the DI is advised to review this practice and consider a more permanent solution to the use of extension cables.
8	PFE(2b)	As part of the environmental monitoring protocol the HVB uses Tryptone Soya Agar plates. The plates are incubated and analysed by the microbiology department. The protocol supplied by the microbiology department only refers to the use of Sabouraud agar and blood agar plates. The DI is advised to ensure that the SOP from microbiology aligns with current practices in the HVB.

Unit is currently deputising for the PD in this area. The DI is advised to formalise this role and nominate the individual to be a PD on the licence.	9	N/A	The DI oversees a large amount of licensable activities and makes effective use of a person designated (PD) in each department. A member of the Burns Unit is currently deputising for the PD in this area. The DI is advised to formalise this role and nominate the individual to be a PD on the licence.
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Concluding comments

The HTA saw various examples of good practice during the inspection. Due to the infrequency of activity and staff rotation, the Burns Unit has developed a step by step guide for the procurement of skin. This guide is displayed in key areas. The Burns Unit carries out a monthly review of mandatory training records and the Trust requires that 95% of staff complete their mandatory training each month. In the Oncology and Haematology Departments, housekeeping is responsible at the weekends and public holiday periods, for monitoring the temperature in the storage areas. There are clear instructions of who to notify if the temperature falls outside the recommended range. The HVB has developed a protocol that only permits the concessionary release of pulmonary patches five weeks after receipt. This gives a time period of approximately thirty-one days after death and therefore allows time for erroneous paper- work or biopsy results to become available. The DI maintains good oversight of the various activities under the licence.

The HTA has assessed the establishment as suitable to be licensed for the activities specified. To improve practice, the DI has been given advice and guidance on a range of issues covering governance and quality standards as well as premises, facilities and equipment arrangements.

Report sent to DI for factual accuracy: 19th November 2015

Report returned from DI: 2nd December 2015

Final report issued: 4th December 2015

Appendix 1: HTA standards

The HTA standards applicable to this establishment are shown below; those not assessed during the inspection are shown in grey text. Individual standards which are not applicable to this establishment have been excluded.

Human Tissue (Quality and Safety for Human Application) Regulations 2007 Standards Consent

Standard

- C1 Consent is obtained in accordance with the requirements of the HT Act 2004, the Human Tissue (Quality and Safety for Human Application) Regulations 2007 and as set out in the HTA's Codes of Practice.
- a) If the establishment acts as a procurer of tissues and / or cells, there is an established process for acquiring donor consent which meets the requirements of the HT Act 2004 the Human Tissue (Quality and Safety for Human Application) Regulations 2007 (Q&S Regulations) and the HTA's Codes of Practice
- b) If there is a third party procuring tissues and / or cells on behalf of the establishment the third party agreement ensures that consent is obtained in accordance with the requirements of the HT Act 2004, the Q&S Regulations and the HTA's Codes of Practice.
- c) The establishment or the third party's procedure on obtaining donor consent includes how potential donors are identified and who is able to take consent.
- d) Consent forms comply with the HTA Codes of Practice.
- e) Completed consent forms are included in records and are made accessible to those using or releasing tissue and / or cells for a Scheduled Purpose.
- C2 Information about the consent process is provided and in a variety of formats.
- a) The procedure on obtaining consent details what information will be provided to donors. As a minimum, the information specified by Directions 003/2010 is included.
- b) If third parties act as procurers of tissues and / or cells, the third party agreement details what information will be provided to donors. As a minimum, the information specified by Directions 003/2010 is included.
- c) Information is available in suitable formats and there is access to independent interpreters when required.
- d) There are procedures to ensure that information is provided to the donor or donor's family by trained personnel.
- C3 Staff involved in seeking consent receive training and support in the implications and essential requirements of taking consent.
- a) Staff involved in obtaining consent are provided with training on how to take informed consent in accordance with the requirements of the HT Act 2004 and Code of Practice on Consent.
- b) Training records are kept demonstrating attendance at training on consent.

Governance and Quality

Standard

GQ1 All aspects of the establishment's work are supported by ratified documented policies and procedures as part of the overall governance process.

- a) There is an organisational chart clearly defining the lines of accountability and reporting relationships.
- b) There are procedures for all licensable activities that ensure integrity of tissue and / or cells and minimise the risk of contamination.
- c) There are regular governance meetings, for example health and safety, risk management and clinical governance committees, which are recorded by agendas and minutes.
- d) There is a document control system to ensure that changes to documents are reviewed, approved, dated and documented by an authorised person and only current documents are in use.
- e) There are procedures for tissue and / or cell procurement, which ensure the safety of living donors.
- f) There are procedures for tissue and / or cell procurement, which ensure the dignity of deceased donors.
- g) There are procedures to ensure that an authorised person verifies that tissues and / or cells received by the establishment meet required specifications.
- h) There are procedures for the management and quarantine of non-conforming consignments or those with incomplete test results, to ensure no risk of cross contamination.
- i) There are procedures to ensure tissues and / or cells are not released from quarantine until verification has been completed and recorded.
- j) There are procedures detailing the critical materials and reagents used and where applicable, materials and reagents meet the standards laid down by the European directives on medical devices and in vitro diagnostic medical devices.
- k) There is a procedure for handling returned products.
- I) There are procedures to ensure that in the event of termination of activities for whatever reason, stored tissues and / or cells are transferred to another licensed establishment or establishments.
- m) The criteria for allocating tissues and / or cells to patients and health care institutions are documented and made available to these parties on request.
- n) The establishment ensures imports from non EEA states meet the standards of quality and safety set out in Directions 003/2010.
- o) There is a complaints system in place.
- p) There are written agreements with third parties whenever an activity takes place that has the potential to influence the quality and safety of human tissues and / or cells.
- q) There is a record of agreements established with third parties.
- r) Third party agreements specify the responsibilities of the third party and meet the requirements set out in Directions 003/2010.

- s) Third party agreements specify that the third party will inform the establishment in the event of a serious adverse reaction or event.
- t) There are procedures for the re-provision of service in an emergency.
- GQ2 There is a documented system of quality management and audit.
- a) There is a quality management system which ensures continuous and systematic improvement.
- b) There is an internal audit system for all licensable activities.
- c) An audit is conducted in an independent manner at least every two years to verify compliance with protocols and HTA standards, and any findings and corrective actions are documented.
- d) Processes affecting the quality and safety of tissues and / or cells are validated and undergo regular evaluation to ensure they continue to achieve the intended results.
- GQ3 Staff are appropriately qualified and trained in techniques relevant to their work and are continuously updating their skills.
- a) There are clearly documented job descriptions for all staff.
- b) There are orientation and induction programmes for new staff.
- c) There are continuous professional development (CPD) plans for staff and attendance at training is recorded.
- d) There is annual documented mandatory training (e.g. health and safety and fire).
- e) Personnel are trained in all tasks relevant to their work and their competence is recorded.
- f) There is a documented training programme that ensures that staff have adequate knowledge of the scientific and ethical principles relevant to their work, and the regulatory context.
- g) There is a documented training programme that ensures that staff understand the organisational structure and the quality systems used within the establishment.
- h) There is a system of staff appraisal.
- i) Where appropriate, staff are registered with a professional or statutory body.
- j) There are training and reference manuals available.
- k) The establishment is sufficiently staffed to carry out its activities.
- GQ4 There is a systematic and planned approach to the management of records.
- a) There are procedures for the creation, identification, maintenance, access, amendment, retention and destruction of records.
- b) There is a system for the regular audit of records and their content to check for completeness, legibility and accuracy and to resolve any discrepancies found.
- c) Written records are legible and indelible. Records kept in other formats such as computerised records are stored on a validated system.

- d) There is a system for back-up / recovery in the event of loss of computerised records.
- e) The establishment keeps a register of the types and quantities of tissues and / or cells that are procured, tested, preserved, processed, stored and distributed or otherwise disposed of, and on the origin and destination of tissues and cells intended for human application.
- f) There are procedures to ensure that donor documentation, as specified by Directions 003/2010, is collected and maintained.
- g) There is a system to ensure records are secure and that donor confidentiality is maintained in accordance with Directions 003/2010.
- h) Raw data which are critical to the safety and quality of tissues and cells are kept for 10 years after the use, expiry date or disposal of tissues and / or cells.
- i) The minimum data to ensure traceability from donor to recipient as required by Directions 003/2010 are kept for 30 years after the use, expiry or disposal of tissues and / or cells.
- j) Records are kept of products and material coming into contact with the tissues and / or cells.
- k) There are documented agreements with end users to ensure they record and store the data required by Directions 003/2010.
- I) The establishment records the acceptance or rejection of tissue and / or cells that it receives and in the case of rejection why this rejection occurred.
- m) In the event of termination of activities of the establishment a contingency plan to ensure records of traceability are maintained for 10 or 30 years as required.
- GQ5 There are documented procedures for donor selection and exclusion, including donor criteria.
- a) Donors are selected either by the establishment or the third party acting on its behalf in accordance with the criteria required by Directions 003/2010.
- b) The testing of donors by the establishment or a third party on behalf of the establishment is carried out in accordance with the requirements of Directions 003/2010.
- c) In cases other than autologous donors, donor selection is carried out by authorised personnel and signed and reviewed by a qualified health professional.
- d) There is a system in place either at the establishment or at a third party acting on its behalf to record results of donor selection and associated tests.
- e) Testing of donor samples is carried out using CE marked diagnostic tests.
- f) Samples taken for donor testing are clearly labelled with the time and place the sample was taken and a unique donor identification code.
- GQ6 A coding and records system facilitates traceability of tissues and / or cells, ensuring a robust audit trail.
- a) There is a donor identification system which assigns a unique code to each donation and to each of the products associated with it.
- b) An audit trail is maintained, which includes details of when the tissues and / or cells were acquired and from where, the uses to which the tissues and / or cells were put, when the tissues and / or cells were transferred elsewhere and to whom.

- c) The establishment has procedures to ensure that tissues and / or cells imported, procured, processed, stored, distributed and exported are traceable from donor to recipient and vice versa.
- GQ7 There are systems to ensure that all adverse events, reactions and/or incidents are investigated promptly.
- a) There are procedures for the identification, reporting, investigation and recording of adverse events and reactions, including documentation of any corrective or preventative actions.
- b) There is a system to receive and distribute national and local information (e.g. HTA regulatory alerts) and notify the HTA and other establishments as necessary of serious adverse events or reactions.
- c) The responsibilities of personnel investigating adverse events and reactions are clearly defined.
- d) There are procedures to identify and decide the fate of tissues and / or cells affected by an adverse event, reaction or deviation from the required quality and safety standards.
- e) In the event of a recall, there are personnel authorised within the establishment to assess the need for a recall and if appropriate initiate and coordinate a recall.
- f) There is an effective, documented recall procedure which includes a description of responsibilities and actions to be taken in the event of a recall including notification of the HTA and pre-defined times in which actions must be taken.
- g) Establishments distributing tissue and / or cells provide information to end users on how to report a serious adverse event or reaction and have agreements with them specifying that they will report these events or reactions.
- h) Establishments distributing tissues and / or cells have systems to receive notifications of serious adverse events and reactions from end users and notify the HTA.
- GQ8 Risk assessments of the establishment's practices and processes are completed regularly and are recorded and monitored appropriately.
- a) There are documented risk assessments for all practices and processes.
- b) Risk assessments are reviewed regularly, as a minimum annually or when any changes are made that may affect the quality and safety of tissues and cells.
- c) Staff can access risk assessments and are made aware of local hazards at training.
- d) A documented risk assessment is carried out to decide the fate of any tissue and / or cells stored prior to the introduction of a new donor selection criteria or a new processing step, which enhances the quality and safety of tissue and / or cells.

Premises, Facilities and Equipment

Standard

PFE1 The premises are fit for purpose.

- a) A risk assessment has been carried out of the premises to ensure that they are fit for purpose.
- b) There are procedures to review and maintain the safety of staff, visitors and patients.

- c) The premises have sufficient space for procedures to be carried out safely and efficiently.
- d) Where appropriate, there are procedures to ensure that the premises are of a standard that ensures the dignity of deceased persons.
- e) There are procedures to ensure that the premises are secure and confidentiality is maintained.
- f) There is access to a nominated, registered medical practitioner and / or a scientific advisor to provide advice and oversee the establishment's medical and scientific activities.

PFE2 Environmental controls are in place to avoid potential contamination.

- a) Tissues and / or cells stored in quarantine are stored separately from tissue and / or cells that have been released from quarantine.
- b) Where processing of tissues and / or cells involves exposure to the environment, it occurs in an appropriate, monitored environment as required by Directions 003/2010.
- c) There are procedures for cleaning and decontamination.
- d) Staff are provided with appropriate protective clothing and equipment that minimise the risk of contamination of tissue and / or cells and the risk of infection to themselves.

PFE3 There are appropriate facilities for the storage of tissues and / or cells, consumables and records.

- a) Tissues, cells, consumables and records are stored in secure environments and precautions are taken to minimise risk of damage, theft or contamination.
- b) There are systems to deal with emergencies on a 24 hour basis.
- c) Tissues and / or cells are stored in controlled, monitored and recorded conditions that maintain tissue and / or cell integrity.
- d) There is a documented, specified maximum storage period for tissues and / or cells.

PFE4 Systems are in place to protect the quality and integrity of tissues and / or cells during transport and delivery to its destination.

- a) There is a system to ensure tissue and / or cells are not distributed until they meet the standards laid down by Directions 003/2010.
- b) There are procedures for the transport of tissues and / or cells which reflect identified risks associated with transport.
- c) There is a system to ensure that traceability of tissues and / or cells is maintained during transport.
- d) Records are kept of transportation and delivery.
- e) Tissues and / or cells are packaged and transported in a manner and under conditions that minimise the risk of contamination and ensure their safety and quality.
- f) There are third party agreements with courier or transport companies to ensure that any specific transport conditions required are maintained.
- g) Critical transport conditions required to maintain the properties of tissue and / or cells are defined

and documented.

- h) Packaging and containers used for transportation are validated to ensure they are fit for purpose.
- i) Primary packaging containing tissues and / or cells is labelled with the information required by Directions.
- j) Shipping packaging containing tissues and / or cells is labelled with the information required by Directions.

PFE5 Equipment is appropriate for use, maintained, quality assured, validated and where appropriate monitored.

- a) Critical equipment and technical devices are identified, validated, regularly inspected and records are maintained.
- b) Critical equipment is maintained and serviced in accordance with the manufacturer's instructions.
- c) Equipment affecting critical processes and storage parameters is identified and monitored to detect malfunctions and defects and procedures are in place to take any corrective actions.
- d) New and repaired equipment is validated before use and this is documented.
- e) There are documented agreements with maintenance companies.
- f) Cleaning, disinfection and sanitation of critical equipment is performed regularly and this is recorded.
- g) Instruments and devices used for procurement are sterile, validated and regularly maintained.
- h) Users have access to instructions for equipment and receive training in the use of equipment and maintenance where appropriate.
- i) Staff are aware of how to report an equipment problem.
- j) For each critical process, the materials, equipment and personnel are identified and documented.
- k) There are contingency plans for equipment failure.

Disposal

Standard

- D1 There is a clear and sensitive policy for disposing of tissues and / or cells.
- a) The disposal policy complies with HTA's Codes of Practice.
- b) The disposal procedure complies with Health and Safety recommendations.
- c) There is a documented procedure on disposal which ensures that there is no cross contamination.
- D2 The reasons for disposal and the methods used are carefully documented.
- a) There is a procedure for tracking the disposal of tissue and / or cells that details the method and reason for disposal.

b) Disposal arrangements reflect (where applicable) the consent given for disposal.

Human Tissue Act 2004 Standards

Consent standards

C1 Consent is obtained in accordance with the requirements of the Human Tissue Act 2004 (HT Act) and as set out in the code of practice

- Consent forms comply with the HTA's Code of Practice
- Consent forms are in records and are made accessible to those using or releasing relevant material for a scheduled purpose
- If the establishment obtains consent, a process is in place for acquiring consent in accordance with the requirements of the HT Act 2004 and the HTA's Codes of Practice
- Where applicable, there are agreements with third parties to ensure that consent is obtained in accordance with the requirements of the HT Act 2004 and the HTA's Codes of Practice
- Consent procedures have been ethically approved

C2 Information about the consent process is provided and in a variety of formats

- Standard operating procedures (SOPs) detail the procedure for providing information on consent
- Agreements with third parties contain appropriate information
- Independent interpreters are available when appropriate
- Information is available in suitable formats, appropriate to the situation
- Consent procedures have been ethically approved

C3 Staff involved in seeking consent receive training and support in the implications and essential requirements of taking consent

- Standard operating procedures (SOPs) detail the consent process
- Evidence of suitable training of staff involved in seeking consent
- Records demonstrate up-to-date staff training
- Competency is assessed and maintained

Governance and quality system standards

GQ1 All aspects of the establishments work are supported by ratified documented policies and procedures as part of the overall governance process

- Policies and procedures are in place, covering all activities related to the storage of relevant material for research in connection with disorders, or the functioning, of the human body
- Appropriate risk management systems are in place

- Regular governance meetings are held; for example, health and safety and risk management committees, agendas and minutes
- Complaints system

GQ2 There is a documented system of quality management and audit

- A document control system, covering all documented policies and standard operating procedures (SOPs).
- Schedule of audits
- Change control mechanisms for the implementation of new operational procedures

GQ3 Staff are appropriately qualified and trained in techniques relevant to their work and are continuously updating their skills

- Qualifications of staff and training are recorded, records showing attendance at training
- Orientation and induction programmes
- Documented training programme, (e.g. health and safety, fire, risk management, infection control), including developmental training
- Training and reference manuals
- Staff appraisal / review records and personal development plans are in place

GQ4 There is a systematic and planned approach to the management of records

- Documented procedures for the creation, amendment, retention and destruction of records
- Regular audit of record content to check for completeness, legibility and accuracy
- Back-up / recovery facility in the event of loss of records
- Systems ensure data protection, confidentiality and public disclosure (whistle-blowing)

GQ5 There are documented procedures for distribution of body parts, tissues or cells

- A process is in place to review the release of relevant material to other organisations
- An agreement is in place between the establishment and the organisation to whom relevant material is supplied regarding the tracking and use of material and eventual disposal or return

GQ6 A coding and records system facilitates traceability of bodies, body parts, tissues and cells, ensuring a robust audit trail

- There is an identification system which assigns a unique code to each donation and to each of the products associated with it
- An audit trail is maintained, which includes details of when and where the relevant material
 was acquired, the consent obtained, the uses to which the material was put, when the material
 was transferred and to whom

GQ7 There are systems to ensure that all adverse events are investigated promptly

- Corrective and preventive actions are taken where necessary and improvements in practice are made
- System to receive and distribute national and local information (e.g. HTA communications)

GQ8 Risk assessments of the establishment's practices and processes are completed regularly and are recorded and monitored appropriately

- Documented risk assessments for all practices and processes
- Risk assessments are reviewed when appropriate
- Staff can access risk assessments and are made aware of local hazards at training

Premises, facilities and equipment standards

PFE1 The premises are fit for purpose

- A risk assessment has been carried out of the premises to ensure that they are appropriate for the purpose
- Policies in place to review and maintain the safety of staff, authorised visitors and students
- The premises have sufficient space for procedures to be carried out safely and efficiently
- Policies are in place to ensure that the premises are secure and confidentiality is maintained

PFE 2 Environmental controls are in place to avoid potential contamination

- Documented cleaning and decontamination procedures
- Staff are provided with appropriate protective equipment and facilities that minimise risks from contamination
- Appropriate health and safety controls are in place

PFE3 There are appropriate facilities for the storage of bodies, body parts, tissues and cells, consumables and records.

- Relevant material, consumables and records are stored in suitable secure environments and precautions are taken to minimise risk of damage, theft or contamination
- Contingency plans are in place in case of failure in storage area
- Critical storage conditions are monitored and recorded
- System to deal with emergencies on 24 hour basis
- Records indicating where the material is stored in the premises

PFE 4 Systems are in place to protect the quality and integrity of bodies, body parts, tissues and cells during transport and delivery to a destination

- Documented policies and procedures for the appropriate transport of relevant material, including a risk assessment of transportation
- A system is in place to ensure that traceability of relevant material is maintained during transport
- Records of transportation and delivery
- Records are kept of any agreements with recipients of relevant material
- Records are kept of any agreements with courier or transport companies

PFE5 Equipment is appropriate for use, maintained, quality assured, validated and where appropriate monitored

- Records of calibration, validation and maintenance, including any agreements with maintenance companies
- Users have access to instructions for equipment and receive training in use and maintenance where appropriate
- Staff aware of how to report an equipment problem
- Contingency plan for equipment failure

Disposal Standards

D1 There is a clear and sensitive policy for disposing of human organs and tissue

- Documented disposal policy
- Policy is made available to the public
- Compliance with health and safety recommendations

D2 The reason for disposal and the methods used are carefully documented

- Standard operating procedures (SOPs) for tracking the disposal of relevant material detail the method and reason for disposal
- Where applicable, disposal arrangements reflect specified wishes

Appendix 2: Classification of the level of shortfall (HA)

Where the HTA determines that a licensing standard is not met, the improvements required will be stated and the level of the shortfall will be classified as 'Critical', 'Major' or 'Minor'. Where the HTA is not presented with evidence that an establishment meets the requirements of an expected standard, it works on the premise that a lack of evidence indicates a shortfall.

The action an establishment will be required to make following the identification of a shortfall is based on the HTA's assessment of risk of harm and/or a breach of the HT Act or associated Directions.

1. Critical shortfall:

A shortfall which poses a significant direct risk of causing harm to a recipient patient or to a living donor,

Or

A shortfall which poses a significant risk to human safety and/or dignity or is a breach of the Human Tissue Act 2004 (HT Act) or associated Directions.

Or

A number of 'major' shortfalls, none of which is critical on its own, but viewed cumulatively represent a systemic failure and therefore are considered 'critical'.

A critical shortfall may result in one or more of the following:

- (1) A notice of proposal being issued to revoke the licence
- (2) Some or all of the licensable activity at the establishment ceasing with immediate effect until a corrective action plan is developed, agreed by the HTA and implemented.
- (3) A notice of suspension of licensable activities
- (4) Additional conditions being proposed
- (5) Directions being issued requiring specific action to be taken straightaway

2. Major shortfall:

A non-critical shortfall.

A shortfall in the carrying out of licensable activities which poses an indirect risk to the safety of a donor or a recipient

Of

A shortfall in the establishment's quality and safety procedures which poses an indirect risk to the safety of a donor or a recipient;

or

A shortfall which indicates a major deviation from the **Human Tissue (Quality and Safety for Human Application) Regulations 2007** or the **HTA Directions**;

or

A shortfall which indicates a breach in the relevant Codes of Practices, the HT Act and other relevant professional and statutory guidelines;

or

A shortfall which indicates a failure to carry out satisfactory procedures or a failure on the part of the designated individual to fulfil his or her legal duties;

or

A combination of several 'minor' shortfalls, none of which is major on its own, but which, viewed cumulatively, could constitute a major shortfall.

In response to a major shortfall, an establishment is expected to implement corrective and preventative actions within 1-2 months of the issue of the final inspection report. Major shortfalls pose a higher level of risk and therefore a shorter deadline is given, compared to minor shortfalls, to ensure the level of risk is reduced in an appropriate timeframe.

3. Minor shortfall:

A shortfall which cannot be classified as either critical or major and, which can be addressed by further development by the establishment.

This category of shortfall requires the development of a corrective action plan, the results of which will usually be assessed by the HTA either by desk based review or at the time of the next inspection.

In response to a minor shortfall, an establishment is expected to implement corrective and preventative actions within 3-4 months of the issue of the final inspection report.

Follow up actions

A template corrective and preventative action plan will be sent as a separate Word document with both the draft and final inspection report. You must complete this template and return it to the HTA within 14 days of the issue of the final report.

Based on the level of the shortfall, the HTA will consider the most suitable type of follow-up of the completion of the corrective and preventative action plan. This may include a combination of

- a follow-up site-visit inspection
- a request for information that shows completion of actions
- monitoring of the action plan completion
- follow up at next desk-based or site-visit inspection.

After an assessment of your proposed action plan you will be notified of the follow-up approach the HTA will take.