Site visit inspection report on compliance with HTA minimum standards

NHSBT Liverpool

HTA licensing number 11018

Licensed for the

- **procurement, processing, testing, storage, distribution, import and export of human tissues and cells for human application under the Human Tissue (Quality and Safety for Human Application) Regulations 2007 (as amended)**

- **storage of relevant material which has come from a human body for use for a scheduled purpose**

25 - 27 September and 1 October 2018

Summary of inspection findings

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

Although the HTA found that NHSBT Liverpool (the establishment) had met the majority of the HTA standards, five minor shortfalls were found in relation to Governance and Quality and Premises, Facilities and Equipment. These relate to the content of the standard operating procedures; the monitoring of the temperature of the fridge used to store blood samples; an absence of ongoing assessment of staff competency; the limited scope of audits; the reviewing of agreements with respect to SAEARs reporting and the need to have appropriate measures in place to monitor the quality and safety of tissues during processing of ocular tissue.

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 Category; Tissue Type	Procurement	Processing	Testing	Storage	Distribution	Import	Export
Progenitor Cell, Haematopoietic, Peripheral Blood Stem Cells (PBSC);	**TPA**	**E**	**E**	**E**	**E**		
Progenitor Cell, Hematopoietic, Cord Blood; Cord Blood	**TPA**	**E***	**E***	**E***	**E***		
Progenitor Cell, Hematopoietic, Bone Marrow; Bone Marrow	**TPA**	**E***	**E***	**E***	**E***		

Mature Cell, T Cell (DLI); DLI	**TPA**	**E***	**E***	**E***	**E***		
Musculoskeletal, Bone; Bone	**E**	**E**	**E**	**E**	**E**		
Musculoskeletal, Tendon & Ligament; Tendons	**E**	**E**	**E**	**E**	**E**		
Musculoskeletal, Tendon & Ligament; Ligaments	**E**	**E**	**E**	**E**	**E**		
Musculoskeletal, Cartilage; Cartilage	**E**	**E**	**E**	**E**	**E**		
Musculoskeletal, Cartilage; Other (Trachea)	**E**	**E**	**E**	**E**	**E**		
Musculoskeletal, Bone; Demineralised Bone Matrix (DBM)		**E**	**E**	**E**	**E**		
Skin; Skin	**E**	**E**	**E**	**E**	**E**		
Cardiovascular, Valves; Heart Valves	**E**	**E**	**E**	**E**	**E**	**E**	
Membrane, Pericardium; Pericardium	**E**	**E**	**E**	**E**	**E**		
Membrane, Amniotic; Amniotic Membrane	**TPA**	**E**	**E**	**E**	**E**		
Ocular; Cornea	**E / TPA**	**E**	**E**	**E**	**E**		
Ocular; Sclera	**E / TPA**	**E**	**E**	**E**	**E**		
Cardiovascular, Vessels; Vessels	**E**	**E**	**E**	**E**	**E**	**E**	
Mature Cells, Hepatocyte; Hepatocytes	**E**	**E**	**E**	**E**	**E**	**E**	

Background to the establishment and description of inspection activities undertaken

NHSBT Liverpool (the establishment), is licensed for procurement, processing, testing, storage, distribution, import and export of human tissue and cells for human application under the Human Tissue (Quality and Safety for Human Application) Regulations 2007 (as amended).

The establishment consists of a hub at the Liverpool Speke site and a number of satellites. The main NHSBT multi-tissue bank is based at the hub and consists of tissue storage areas, a donation facility, a processing unit (12 grade B clean rooms and two grade C clean rooms) and the National Referral Centre (NRC).

The NRC receives donor referrals, approaches potential donor families in order to discuss the options for donation, and completes the consent and donor screening process to allow assessment of the donor. Donor selection is based on agreed donor selection guidelines which are published on the Joint United Kingdom (UK) Blood Transfusion and Tissue Transplantation Services Professional Advisory Committee (JPAC) website. Members of the Tissue and Eye Services Donation Team are responsible for the procurement of tissues from deceased donors. Procurement can take place within the dedicated tissue retrieval facility at the establishment or Tissue Donation Lead Practitioners, Practitioners or assistants may travel to the relevant hospital to perform deceased donor retrievals. Tissue Donation Practitioners are based at four regional centres around the UK, one of which is NHSBT Liverpool. Retrieved tissue, with the exception of ocular tissue, is transported back to the establishment for subsequent processing and storage. Ocular tissue is sent directly to the Eye Bank in Manchester.

Members of the Tissue and Eye Services Production Unit are responsible for the processing, cryopreservation, storage, stock control and issue of tissue for end use. The staff in the Production Unit are employed at Assistant, Practitioner and Specialist level based on their training and experience. Processing competency is assessed on each tissue type after a period of supervised activity followed by an observational assessment by a Specialist; a further assessment is required to demonstrate competency to train others.

The establishment has a local Quality Assurance (QA) team which conducts a review and authorisation of processing records for tissue products prior to distribution of tissue for end use. The QA team is also involved in the maintenance of a programme of quality management in accordance with the local and national requirements of NHSBT quality systems.

The mandatory donor serological testing and bacteriology testing of products is carried out, in accordance with service level agreements (SLAs), at a satellite site or a separate HTA-licensed NHSBT establishment.

This was the sixth routine site visit inspection of the establishment and included visual inspections of the hub including observation of heart valve processing and the tissue issuing department. An audit of the records associated with a heart valve, demineralised bone and skin was undertaken, and no discrepancies were found. Roundtable discussions were held with the staff responsible for processing of autologous PBSC procured by another licensed establishment. During this discussion, processing records for two PBSC units were reviewed; again, no discrepancies were found. Further discussions were held to review risk assessments, audits, and staff training. Documents reviewed included consent forms, mandatory donor serology tests, processing and environmental monitoring records, standard operating procedures (SOPs), and equipment and training records.

Three satellite sites were also inspected. These were:

- NHSBT Manchester Eye Bank

The Eye Bank provides a national supply of corneas and sclera for eye surgery. The Eye Bank operates seven days a week offering an out of hours on-call service. Ocular tissue from deceased donors are procured by the Tissue and Eye Services Donation Team and provided to the Eye Bank. Donor testing for deceased donors is performed at a separate HTA-licensed NHSBT establishment - NHSBT Colindale. The blood samples are first spun down then couriered, at room temperature, to the testing laboratory. Eyes are processed to decontaminate them and to excise corneas from the sclera. Corneas are stored in culture medium at 34˚C for up to 28 days; sclera are stored in 70% ethanol. The acceptance of stored corneas, for patient treatment, is based on macroscopic appearance, validated assays of viability and quantification of the density of viable endothelial cells. Ocular tissue is distributed to end users at ambient temperature. A visual inspection of the premises was undertaken including observation of the excision of two corneas, the receipt of enucleated eyes as well as the distribution of three corneas. Discussions were held with staff and processing records for two corneas were reviewed.

- NHSBT Manchester Testing Laboratory

Donor testing of living donors is undertaken at the testing laboratory at NHSBT Manchester, which is accredited by the United Kingdom Accreditation Service (UKAS). The tests include mandatory serology testing and nucleic acid testing (NAT). Upon arrival of the blood samples a reconciliation form is filled in. The blood samples are then registered, tracked and the test results are recorded on the laboratory information management system. Any confirmatory serology testing is carried out by a reference laboratory. Discussions were held with the Regional Testing Manager. A visual inspection of the testing laboratory was undertaken including the cold room where the testing reagents are stored, the maintenance records of the fridges where the blood samples are stored and a review of the timing and test results of a donor of a stem cell unit. No discrepancies were noted.

- South West London Elective Orthopaedic Centre (SWLEOC)

This satellite procures femoral heads, under a service level agreement, from patients undergoing elective hip revision and replacement surgery. Pre-operative assessment nurses, trained to seek consent, will identify and approach patients scheduled for a hip operation to enquire whether they are interested in femoral head donations. Trained staff at the National Referral Centre (NRC) at NHSBT Liverpool will then seek telephone consent from these patients. These staff are responsible for taking the patient's medical and social history to ensure that the donor is suitable. The 'surgical bone medical questionnaire' and consent form are completed by the NRC staff member as a paper copy. Staff at SWLEOC are informed of suitable donors and this is highlighted in the surgical list. Procurement kits are supplied by NHSBT Colindale. On the day of procurement, a pre-operative blood sample for mandatory serology testing is taken. During procurement, two bone chips taken from the femoral head for sterility testing are placed in separate bottles of culture media and the femoral head is placed in an inner container and then a secondary container by the scrub theatre nurse. The femoral head containers and the culture media bottles are then placed into a locked, temperature-monitored -40°C freezer for short-term storage. The blood sample is stored in a fridge. The top copy of the consent form is kept with the blood sample and a second copy is

kept in the patient's notes. Once a fortnight, staff from the tissue donation team based at NHSBT Colindale visit the centre to collect the procured femoral heads and accompanying culture media bottles. Blood samples are collected on three days a week and sent to NHSBT Manchester for testing. If the volume of blood is less than 10 ml the sample is sent to NHSBT Colindale. During the visit to collect the femoral heads, the freezer temperature is reviewed and procurement kit stocks are replenished. The bone is then transferred to NHSBT Liverpool. The inspection consisted a visual inspection of the fridge and freezer storage areas and roundtable discussion with staff from NHSBT Colindale who are responsible for overseeing this service. The Person Designated for this licence did not participate in this inspection but during the inspection of another Human Application licence associated with this hospital, discussed the procurement process and shared the procurement records with the inspectors.

NHSBT Liverpool is also licensed under the Human Tissue Act (2004) for the storage of relevant material for the scheduled purpose of research. This aspect of the licence was not inspected during this visit.

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

Governance and Quality

Standard	Inspection findings	Level of shortfall
GQ1 All aspects of the establishment's work are supported by ratified documented policies and procedures as part of the overall governance process.		
b) There are procedures for all licensable activities that ensure integrity of tissue and / or cells and minimise the risk of contamination.	Not all procedures conducted at the Eye Bank are documented in Standard Operating Procedure (SOP). Examples of these include, but are not limited to: • Details of the procedures at the Eye Bank for the handling and transporting of blood samples. • Details of who responds to clean room pressure alarms and how staff in the Eye Bank are informed about the issue. • The SOP 5418/1"NHSBT Eye Bank Corneal Endothelial Assessment", does not include details of how photographs, taken to determine tissue suitability, are stored.	**Minor**

GQ2 There is a documented system of quality management and audit.		
b) There is an internal audit system for all licensable activities.	At the Eye Bank, there was no defined schedule for undertaking internal audits and the audits conducted at the Eye Bank were limited in scope.	**Minor**
GQ3 Staff are appropriately qualified and trained in techniques relevant to their work and are continuously updating their skills.		
e) Personnel are trained in all tasks relevant to their work and their competence is recorded.	Training records at the Eye Bank were incomplete and there is currently no programme for assessing the ongoing competency of the staff at the Eye Bank.	**Minor**
GQ7 There are systems to ensure that all adverse events 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.	The end user agreements and some of the third party agreements held by the Eye Bank do not stipulate that SAEARS must be reported to the HTA within 24 hours from the point of discovery as set out in the "Guide to Quality and Safety Assurance for Human Tissues and Cells for Patient Treatment" 002/2018.	**Minor**

Premises, Facilities and Equipment

PFE3 There are appropriate facilities for the storage of tissues and / or cells, consumables and records.		
c) Tissues and / or cells are stored in controlled, monitored and recorded conditions that maintain tissue and / or cell integrity.	The temperature of the fridge where blood samples, taken from femoral head donors at SWLEOC, are stored is not monitored.	**Minor**
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.	Staff at the Eye Bank do not check or record the pressure differentials of the clean room facility before commencing processing. In addition, if there are any issues with the clean room an alert is sent to the site facilities staff. Staff at the Eye bank rely on the site facilities staff informing them of any issues. There is no formal system in place for receiving, recording or investigating such events.	**Minor**

Advice

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

No.	Standard	Advice
1.	GQ1o	The SOP describing complaints and adverse incidents references a form that is no longer used. The DI is advised to amend the SOP to reflect current practice.
2.	GQ1r	The third party agreements for end users of corneas state that tissues cannot be held on unlicensed premises for more than 48 hours. The DI is advised to include this reminder in the documents that accompany ocular tissue.
3.	PFE5c	The DI is advised to consider the use of swabs to supplement the environmental monitoring in the transfer hatches in the Eye Bank clean room. The DI is also advised to consider swabbing the microscope and camera used to assess the suitability of corneas.
4.	PFE2b	The Stem cell processing group conduct monthly internal audits on five processed PBSC units. However, only one aspect is reviewed that month and then, five new samples are reviewed for another aspect in the following month. No vertical or horizontal audits are conducted for the same sample(s).The DI is advised to extend the scope of the internal audits for the stem cell processing unit.
5.	GQ8a	The risk assessment for the addition of cryoprotectant during the processing of PBSC states a maximum exposure time of 60 minutes is permitted. However, the SOP describing the process permits an exposure time of 75 minutes. The

		DI is advised to review the two documents and ensure that the correct time appears in both documents.
6.	PFE5a	Prior to processing. PBSC units are weighed in order to determine the amount of cryoprotectant required. The establishment uses a calibrated 100-gram weight to calibrate the balance. The DI is advised to consider using an additional calibrated weight to reflect the typical volumes of PBSC received by the establishment.
7.	PFE5c	The DI is advised to clarify, in the Eye Bank temperature monitoring SOP, the actions taken in response to a temperature deviation when staff are off-site.

Concluding comments

Although the HTA found that the establishment had met the majority of the HTA standards, five minor shortfalls were found in relation to Governance and Quality and Premises, Facilities and Equipment. These relate to the content of the standard operating procedures; the monitoring of the temperature of the fridge used to store blood samples; an absence of ongoing assessment of staff competency; the limited scope of audits; the reviewing of agreements with respect to SAEARs reporting and the need to have appropriate measures in place to monitor the quality and safety of tissues during processing of ocular tissue. In addition, the HTA has given advice to the Designated Individual with a view to helping the establishment further develop its working practices.

The HTA requires that the Designated Individual addresses the shortfalls by submitting a completed corrective and preventative action (CAPA) plan within 14 days of receipt of the final report (refer to Appendix 2 for recommended timeframes within which to complete actions). The HTA will then inform the establishment of the evidence required to demonstrate that the actions agreed in the plan have been completed.

The HTA has assessed the establishment as suitable to be licensed for the activities specified subject to corrective and preventative actions being implemented to meet the shortfalls identified during the inspection.

Report sent to DI for factual accuracy: 29 October 2018

Report returned from DI: 5 November 2018

Final report issued: 7 November 2018

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 002/2018 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 002/2018 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.
l) 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 002/2018.
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 002/2018.

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 002/2018, is collected and maintained.
g) There is a system to ensure records are secure and that donor confidentiality is maintained in accordance with Directions 002/2018.
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 002/2018 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 002/2018.
l) 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 002/2018.
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 002/2018.
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.
d) The requirements of the Single European Code are adhered to as set out in Directions 002/2018.
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 002/2018.
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 002/2018.
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.

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 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

   or

   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 failure to carry out satisfactory procedures for the release of tissues and cells 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 by adversely affecting the quality and safety of the tissues and cells.

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.