Site visit inspection report on compliance with HTA minimum standards

Oxford DRWF Human Islet Isolation Facility

HTA licensing number 22496

Licensed for the

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

30-31 July 2019

Summary of inspection findings

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

Although the HTA found that Oxford DRWF Human Islet Isolation Facility (the establishment) had met the majority of the HTA standards, five minor shortfalls were identified. These related to the content of establishment procedures and their alignment with current practice, the scope and impartiality of the independent audit, procedures for the retention of raw data, the content of agreements with third parties, and the temperature monitoring of reagents and consumables held in storage.

Particular examples of strengths and good practice are included in the concluding comments section of the report.

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.

Tissue Category; Tissue Type	Procurement	Processing	Testing	Storage	Distribution	Import	Export
Mature Cell, Pancreatic Islet Cells; Pancreatic islets		**E**			**E**		

Background to the establishment and description of inspection activities undertaken

This report refers to the activities undertaken by the Oxford DRWF Human Islet Isolation Facility (the establishment), which is based at the Churchill Hospital in Oxford. The establishment is licensed under the Human Tissue (Quality and Safety for Human Application) Regulations 2007 (the Regulations) for the processing and distribution of pancreatic islets for human application.

The establishment consists of a purpose built clean room facility and associated storage and office areas. Pancreata from deceased donors are distributed to the establishment as part of the National Pancreas Allocation Scheme, when the pancreas itself is not suitable for use in solid organ transplantation. The establishment is one of three HTA-licensed islet isolation centres in the UK, and shares an on-call rota arrangement for the processing of allogeneic islets with one of these.

Each processing team is led by an experienced senior member of staff, who takes overall responsibility for the processing event. When the establishment receives a request from a clinician to purify the islets, the senior member of staff reviews the relevant NHS Blood and Transplant's Electronic Offering System (EOS) record, information received with the pancreas and the pancreas itself, to ensure the establishment's criteria are met before processing activities begin.

The processing pathway involves sequential dissection, digestion and cell purification steps to isolate islet cells from the surrounding tissues and cells. The digestion and cell purification steps are undertaken in separate microbiological safety cabinets (MSCs), which are maintained and monitored to ensure the required grade A environment is achieved within the surrounding grade B clean room. Operators complete finger dabs during processing and also sample the purified islets for microbiological analysis.

The purified islets are transferred to tissue culture flasks, then maintained in media in a pre-sterilised CO_2 incubator set at 37°C. Cells are assessed after 24 hours, at which point they will be released for transplant or returned to the incubator if not immediately needed. The maximum storage period is 48 hours. Only processed cells that have met the establishment's release criteria for yield, purity, sterility (negative Gram stain), viability, packed cell volume and endotoxin level are released for end use. Results from microbiology testing are reviewed and reported retrospectively. Islets that are not suitable for transplant are disposed of or released for research, if appropriate consent is in place.

At the point of release cells are transferred to a transplant bag set, which includes a bag of wash solution to ensure maximum recovery of islets at the point of transplant. Cells are then labelled and released either internally to the hospital's radiology department, or undergo further packaging for release to specialist transplant centres throughout the United Kingdom.

The establishment has previously undertaken occasional autologous islet processing for patients based at the Churchill Hospital, and has recently begun to participate in a new funded autologous islet transplant programme. Autologous islet purification and transplant is intended to support eligible patients in retaining some insulin-production function after undergoing a complete pancreatectomy procedure. Potential patients suitable for this procedure are identified by clinicians. The explanted pancreas is examined by establishment staff to determine whether the size and condition of the organ is likely to support successful islet recovery. Depending on the volume of cell digest recovered in early processing stages, the final purification step may be eliminated in order to maximise the numbers of viable islet cells recovered. Cells are returned to the patient in theatre, prior to completion of the pancreatectomy procedure.

The establishment has held a licence under the Regulations since 2008, and this was the sixth routine site visit to assess whether or not the establishment continues to meet the relevant regulatory standards. The visit consisted of a visual inspection of the clean room facility and associated storage areas, which included a review of the temperature monitoring system. As with previous inspections, the inspection team were talked through a video presentation of pancreatic islet processing which helped to demonstrate the various techniques used during processing. On the day of the inspection, no processing was taking place.

Round table discussions were held with establishment staff and associates from third parties that have involvement in the work carried out under the licence. During these discussion the systems and records relating to islet assessment, environmental monitoring, training, equipment maintenance, risk assessment, incidents, audits, governance meetings, document control, labelling and arrangements for meeting the requirements of the Single European Code (SEC), contingency planning, record retention, agreements and disposal procedures were reviewed. A vertical audit of four sets of processing records was conducted, of which two sets related to islets from deceased donors for allogeneic transplant and two sets related to the processing of autologous islets for patients undergoing treatment at the Churchill Hospital.

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.	During the inspection a number of examples were noted where the establishment's documented policies and procedures did not reflect current practise. For example: • establishment policies indicated that cleaning of the facility post-processing and on a weekly basis was carried out by staff from a neighbouring establishment, under a formal agreement. During the inspection it was confirmed that cleaning is now undertaken by establishment staff. It was further noted that post-processing cleaning was not captured in establishment records; and • establishment procedures for the sizing and counting of islets specify that four 100µL samples are counted by two operators. In practise nowadays two 100µL samples are counted. It was also noted that formal procedures did not set out the frequency in which clean room 'sticky mats' should be changed, nor was this activity captured in establishment records.	**Minor**
s) Third party agreements specify that the third party will inform the establishment in the event of a serious adverse reaction or event.	The establishment's agreement with a third party that undertakes the environmental and product microbiological testing analysis, does not set out the third party's responsibilities for SAEARs reporting, as required by Directions 002/2018.	**Minor**
GQ2 There is a documented system of quality management and audit.		
c) An audit is conducted in an	The establishment's independent audit was	**Minor**

independent manner at least every two years to verify compliance with protocols and HTA standards, and any findings and corrective actions are documented.	conducted by the same third party staff who undertake activities such as environmental monitoring and microbiological testing on behalf of the establishment. As such, the auditors were not independent of all the applicable HTA standards within the scope of the audit. In addition, the scope of the audit did not encompass all applicable standards. Of those standards that were included, the report generated did not consistently set out the evidence that was reviewed to assess the establishment's compliance.	
GQ4 There is a systematic and planned approach to the management of records.		
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.	The establishment does not have procedures in place to ensure records such as those generated by the temperature monitoring system are retained in accordance with the regulatory requirements.	**Minor**

Premises, Facilities and Equipment

Standard	**Inspection findings**	**Level of shortfall**
PFE3 There are appropriate facilities for the storage of bodies, body parts, tissues, 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.	The establishment uses an electronic system to monitor the temperatures of the rooms, refrigerators and freezers in which reagents and consumables are stored. Data generated by the temperature probes is stored and displayed by an online system. The temperature probes used to monitor each storage area have not been calibrated. The fridges and freezers had not been mapped, and so it could not be determined whether the probes had been located in the warmest locations within the storage space. There are no documented procedures in place for the regular review of the online records to ensure excursions are detected and assessed before they have the potential to impact on the quality and safety of islet products. The monitoring system does not generate an alarm to alert staff to	**Minor**

	temperature excursions.	

Advice

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

No.	Standard	Advice
1.	General	The establishment is considering extending the length of time islets are held in medium prior to release for transplant beyond the currently stipulated 48 hour maximum. The DI is advised to contact the HTA in advance of this activity commencing, to ensure that appropriate amendments to the establishment's licence can be made, and relevant authorisations given.
2.	GQ1c	The establishment has a programme of monthly, minuted meetings, which includes a standing agenda item for consideration of regulatory matters. Information is disseminated to staff involved in processing related activities through weekly meetings, which are not minuted. The DI is advised to put systems in place to ensure that any staff absent from the weekly meeting are updated at the earliest opportunity about any information relevant to their work that was communicated during the meeting.
3.	GQ2c	In responding to the shortfall against this standard the DI is advised to make use of the assessment section in Part 9 of the HTA Human Application Licence Application form (link below), to ensure that an independent assessment against all relevant standards can be clearly demonstrated. https://www.hta.gov.uk/application-forms-and-guidance
4.	GQ3e	Establishment staff undergo initial training and annual requalification in the gowning techniques necessary to support and maintain the aseptic grade A/B processing environment. The DI is advised to consider introducing the use of contact plates and documented pass criteria in the initial and requalification procedures, to demonstrate ongoing competence in this key aseptic skill. The establishment has two procedures for the preparation of density gradients for islet purification, one of which is infrequently used. The DI is advised to ensure this procedure is included in routine training and requalification to ensure that newer lead processing staff are confident about when and how to apply the less frequently used procedure when other senior staff members are not available to provide support. In responding to the shortfall against standard GQ1b, the DI is advised to ensure staff training in how to undertake cleaning of the clean room facility and equipment is documented.
5.	GQ4b	During a review of an autologous islet processing record it was noted that in one processing event the lot information for a consumable, and the time at which a processing event had taken place, had not been recorded. The DI is advised to introduce a system of record review and sign off, as is in place for allogeneic records, to help ensure any omissions are resolved in a timely manner.
6.	GQ7a	The establishment has recently updated their procedures for incident recording and the management of corrective and preventative actions (CAPAs). The DI is advised to ensure that CAPA actions are given appropriate timeframes for completion and that oversight is in place through, for example, monthly meetings. This will help ensure that target dates for completion of CAPAs are

		achieved wherever possible.
7.	PFE3a	In responding to the shortfall against this standard the DI is advised to consider expanding the number of people with access to the online system, to ensure there are sufficient trained staff to undertake regular reviews of the establishment's temperature records.
8.	PFE3a	The DI is advised to introduce procedures to ensure that, where applicable, the expiry dates of enzymes used during processing are amended upon receipt to reflect the manufacturer's stability data under the chosen storage conditions.
9.	PFE5c	The integrity of the establishment's clean room areas is maintained by a validated air handling system and pressure readings are taken before every processing event. The system is not alarmed to alert staff to any excursions from the required air pressure differentials outside working hours, but such events are captured on a display in the establishment's plant room. The DI is advised to introduce a regular documented check of this display, to help ensure that any transient issues with the clean room air handling units are detected before they have the potential to impact on islet processing activities. The power supply to the clean room air handing units is supported by a generator. This back-up function is routinely checked by site engineers, which can cause a transient disruption of air pressures at the point of switchover. The DI is advised to liaise with site services to minimise the potential for this test to disrupt the integrity of the clean room environment, particularly during the establishment's 'on-call' weeks.

Concluding comments

Areas of strength and good practice were observed during the inspection. The establishment is part of the Nuffield Department of Surgery within the University of Oxford. As such there is a strong research focus, knowledge from which informs establishment processes and helps to support continuous improvement. The clean room facility has been specifically designed for the activities undertaken and includes a dedicated, independently cooled room for islet separation. Microscopic images of islets can be shared with staff outside the clean room to allow for second opinions to be sought and for use in training.

There are a number of areas of practice that require improvement, and these have resulted in five minor shortfalls. These relate to the content of establishment procedures and their alignment with current practice, the scope and impartiality of the independent audit, procedures for the retention of raw data, the content of agreements with third parties, and the temperature monitoring of reagents and consumables held in storage.

The HTA has given advice to the Designated Individual with respect to making changes to licensable activities, communicating information to staff not present in meetings, independent audit documentation, training and requalification processes and documentation, CAPA oversight, access to temperature monitoring data, reagent storage temperatures where these differ from the manufacturer's recommendations, and oversight of the status of the facility's AHU status.

The HTA requires that the Designated Individual addresses the shortfalls by submitting a completed 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: 04 September 2019

Report returned from DI: 19 September 2019

Final report issued: 27 September 2019

Completion of corrective and preventative actions (CAPA) plan

Based on information provided, the HTA is satisfied that the establishment has completed the agreed actions in the CAPA plan and in doing so has taken sufficient action to correct all shortfalls addressed in the Inspection Report.

Date: 16 June 2020

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

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.
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.
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.
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.
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.