Site visit inspection report on compliance with HTA minimum standards

Oxford Radcliffe Biobank

HTA licensing number 12217

Licensed under the Human Tissue Act 2004 for the

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

12-14 June 2012

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.

The Oxford Radcliffe Biobank (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.

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 Paragraph 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.

Background to the establishment and description of inspection activities undertaken

This report refers to the activities carried out by the Oxford Radcliffe Biobank (ORB). The ORB is 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 and has been licensed by the HTA since 2007.

The ORB was established in 2006. Now a research facility of the Oxford University Hospitals NHS Trust and the University of Oxford, it functions as a gateway for access to the biospecimen collections held by these organisations. The ORB currently holds over 160,000 samples including cancer and non-cancer biosamples and associated data. Although the majority of collections are in active use, the biobank includes several legacy collections dating back more than 20 years, which are currently archived.

The hub site for the licence, the John Radcliffe Hospital, houses collections within the Nuffield Department of Clinical Laboratory Sciences, the Nuffield Department of Surgical Sciences, and the Weatherall Institute of Molecular Medicine. Two satellite sites were included on the licence when it was first issued, namely the Medical Oncology Unit based at the Churchill Hospital and the Department of Clinical Pharmacology based at the Radcliffe Infirmary. In 2008 an additional satellite site, the Cowley Store, was added to the licence. In 2010, the collections held at Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences (NDORMS) and the Department of Physiology, Anatomy and Genetics were incorporated into this licence as further satellites. These collections had previously been held under separate HTA licences (numbers 12500 and 12361 respectively). Site visit inspections of these licences were conducted in 2010 immediately prior to their merger with the ORB licence and in both instances the establishments were found to have met the HTA's standards.

The majority of collections held at these sites have some form of recognised research ethics approval. The principal collection held at John Radcliffe, and the collections held at NDORMS and the Radcliffe Infirmary, have NRES REC Research Tissue Bank status (numbers 09/H0606/5, 09/H0606/11 and H09/H0606/70 respectively). Other collections are being held as part of specific research projects with NRES REC approval. As such, they are exempt from the licensing requirements of the Act. Where this was found to be the case, the establishment's systems relating to the storage and use of this material were not assessed as part of this inspection. A small number of collections have no current ethical approval.

This report describes the first routine site visit inspection of the licence held by the ORB which took place between 12-14 June 2012. The inspection, which included a visit to each of the sites listed above, included interviews with key members of staff working under the licence, a review of documentation relevant to each group's activities and a visual inspection of the premises. An audit of samples and records was conducted at each site. In total, 47 samples were traced from storage to records or vice versa. The samples chosen for the audit were representative of the range of relevant material stored under the licence and included examples of lung, blood, buffy coat, red blood cells, tendon, bladder, colon and tissue arrays. A variety of storage formats were also included in the audit, including storage at room temperature in fixative, storage in -20^{o}C, -40^{o}C, and -80^{o}C freezers, storage in liquid nitrogen, and storage as formalin-fixed, paraffin-embedded (FFPE) samples. Minor transcription errors in records associated with two samples were noted, although these were readily resolved using supplementary documentation. An FFPE sample dating back to 2006 and listed in the electronic records could not be found in the tissue array block store. Associated records suggested that this sample may have been used up in 2009 although this could not be confirmed at the time of the inspection. On the whole, the systems employed by the establishment to manage sample acquisition, storage and use were found to be very robust.

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.	GQ2	The DI is advised to implement a more consistent approach to audits across the licence that draws upon the examples of good practice noted during the course of the inspection. This might include a clear schedule of audits at each site that outlines the frequency and range of audits to be conducted. Audit findings would need to be documented and each research group whould need to have a system in place for ensuring that non-conformances are resolved in an appropriate timeframe.
2.	GQ4	The DI is advised that all staff should adhere to a consistent, accepted procedure for correcting errors in written records. Such an approach, which could include striking through errors with a single line and initialling and dating corrections, would facilitate audit. SOPs relating to the management of records whould need to be updated accordingly.
3.	PFE3	In general, the establishment was found to have implemented a number of very robust systems to ensure that material stored under the licence is secure. However, the DI is advised to consider whether existing arrangements that permit contractors to work unsupervised in certain storage facilities adequately mitigate the risk of unauthorised access to the samples.

Concluding comments

The HTA saw numerous examples of good practice during the course of the inspection.

The ORB has a robust approach to governance. This is reflected in the establishment's 'Constitution' and a series of overarching policy documents, which clearly set out not only the establishment's structure, strategy and general governance arrangements, but also their approach to a range of activities such as consent, security and disposal. Compliance with these policies is a condition of ORB membership and is audited at the time of admission. Together, such systems help to ensure that certain minimum standards are met across the licence.

Groups that join the ORB also have access to a wide range of centralised resources, including SOPs, templates and guidance documents, many of which can be accessed through the Oxford Laboratory Medicine website. They are supported by a comprehensive series of meetings which aim to ensure that registered collections are used and managed in accordance with the terms of their HTA licence. These include regular, minuted meetings of the ORB Steering Committee and the ORB HTA Committee. The latter, which is chaired by the DI and attended by representatives of each of the collections stored under the licence, serves as a forum for sharing expertise and resources, and as a means of identifying and implementing examples of best practice.

The establishment have also set up an Access Committee responsible for ensuring that 'ORB fulfils its role as a 'safe haven' for the collection and storage of human biospecimens and data and as an 'honest broker' for the fair distribution of biospecimens and data for research'. This committee, which reviews and authorises all requests for material, forms part of a range of physical and operational safeguards that have been put in place to ensure that samples are stored securely and are only used in a manner that is consistent with the consent that was originally given and with the organisation's own policies.

The establishment has a comprehensive and well documented approach to staff training. In addition to mandatory health and safety training, staff also receive additional training in the form of Powerpoint presentations and handouts on the Human Tissue Act and how it applies to the research sector. Persons Designated, and other key personnel involved in the licensable activities, are also encouraged to complete relevant e-learning courses, including the MRC's HTA e-learning module and the HTA's DI e-learning course. The latter had been completed by a significant number of people in addition to the DI himself.

Training is also given to all those involved in taking consent and competency is recorded and regularly reviewed, with additional training being provided when deemed necessary. Mirroring this, the consent process as a whole is well managed. Although the material used to support the consent process varies slightly from site-to-site, it is uniformly clear and comprehensive. This helps to ensure that generic, informed consent is obtained prior to sample acquisition and storage.

A culture of quality was evident throughout the inspection. Staff were enthusiastic with regard to the quality procedures in place, seeing them as a way to increase both the quality and quantity of material available for medical research. There was also a strong commitment to continuous improvement, with new systems for sample management and document control being developed for widespread use within the ORB. Implementation of such systems across the licence should serve to further strengthen the organisation's approach to governance and quality.

The HTA has given advice to the Designated Individual regarding the establishment's approach to audits, document correction and the supervision of contractors working in sample storage facilities. Items of advice and guidance provided by the HTA following the inspections of licences 12500 and 12361 had been considered by the establishments concerned and, where appropriate, acted upon.

The HTA has assessed the establishment as suitable to be licensed for the activities specified.

Report sent to DI for factual accuracy: 13 July 2012

Report returned from DI: 27 July 2012

Final report issued: 27 July 2012

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.

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 in place 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

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 risk to human safety and/or dignity or is a breach of the Human Tissue Act 2004 (HT Act) or associated Directions

   or

   A combination of several major shortfalls, none of which is critical on its own, but which together could constitute a critical shortfall and should be explained and reported as such.

   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 that:

   - poses a risk to human safety and/or dignity, or
   - indicates a failure to carry out satisfactory procedures, or
   - indicates a breach of the relevant CoPs, the HT Act and other relevant professional and statutory guidelines, or
   - has the potential to become a critical shortfall unless addressed

   or

   A combination of several minor shortfalls, none of which is major on its own, but which, together, could constitute a major shortfall and should be explained and reported as such.

   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, but which indicates a departure from expected standards.

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 or site visit.

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.