NHS Borders

Title	Infection Control Manual – Section 4 Policies & Guidelines
Document Type	Policy
Document Number	IPCT001/03
Version Number	4th Edition
Approved by	Infection Control Committee
Issue date	June 2013
Review date	October 2015
Distribution	All NHS Borders Staff
Prepared by	Infection Prevention Control Team
Developed by	Infection Prevention Control Team
Equality & Diversity Impact Assessed	No

4.1 MANAGEMENT OF PATIENTS WITH CLOSTRIDIUM DIFFICILE

Aim: Identify persons with Clostridium difficile [C. diff] and implement appropriate precautions to prevent spread.

Modes of Spread

- By hands of staff
- Contamination of environment and equipment e.g. toilets/commodes

Standards

Nursing Care of symptomatic patient

- Nurse patient in single room isolation with en suite facilities. If this is not possible, ensure use of dedicated commode.
- inform a member of the Infection Prevention Control Team
- send stool specimen to microbiology laboratory to confirm diagnosis: state on Microbiology form C&S and C.diff
- adhere to enteric precautions; ensure adequate supply and access to PPE and ensure the use of dedicated care equipment where possible
- Provide CDI leaflet to patient when appropriate
- Following contact with these patients and their immediate environment, staff must wash their hands before leaving room as alcohol gels are ineffective against the C. diff spores. Staff should also endeavour to wash their hands after leaving room when possible
- treat linen as infected – follow local policy (section 8.5)

  Personal laundry should be sent according to local guidelines. For relatives wishing to take patients clothing home to launder, relatives must be informed of the precautions to take. The clothing should be placed into plastic bag for the relative and relative informed that clothing should be washed on a separate cycle at the correct temperature for the clothing. They should be supplied with the 'Washing Clothes at Home' leaflet

- clean dedicated commode with Actichlor plus diluted to 1000ppm chlorine solution after each use. Dry thoroughly

- 1,000ppm Actichlor plus chlorine solution should be used for routine cleaning purposes in the affected room, by general services staff

- When patient is 48 hrs asymptomatic, single room isolation and enteric precautions may be stopped. If patient is to remain in single room, then terminal clean must still be performed in that room using 1,000ppm Chlorine solution.

- Terminal cleaning of single room and all patient equipment is essential following discharge, using 1,000ppm Chlorine solution.

  There is no need to send further stool specimens unless patient becomes symptomatic again.

Treatment

Treatment for C. diff is only necessary if symptoms are severe or are continuing with no improvement.

Where possible antibiotic therapy should be discontinued

For advice on clinical management please consult NHS Borders Antimicrobial Guidelines.

4.2 GUIDELINES FOR MICROBIOLOGY SPECIMEN COLLECTION

Aim: To ensure that all staff are aware of the rationale for appropriate specimen collection and the correct procedures

Introduction

Specimen collection is taking samples from patients for the purpose of laboratory examination in order to identify micro-organisms causing infection.

Healthy individuals are colonised by different bacteria ('normal flora') on sites such as skin, the throat and the vagina. Therefore samples should only be taken when there clinical suspicion of infection.

Timely, accurate and useful laboratory reports are possible only if specimens are properly collected and accompanied by specific detailed patient information with the request.

Mandatory data includes patient identifiers - surname/forename, date of birth, CHI/hospital number), location and requestor details and relevant clinical details.

The specimen container should also be clearly labelled with patient identification and sample type/source.

General principles

Specimens should be obtained using safe techniques and practices. Compliance with existing health and safety and infection control policies/guidelines.

Infection Control Precautions and Hand Hygiene are important when collecting specimens.

Appropriate personal protective equipment (e.g. gloves and aprons) should always be worn when collecting/handling blood, body fluids and tissue specimens/samples.

Waste, including sharps should be disposed of safely and appropriately.

Specimens should be transported to the laboratory promptly. Delay may result in the loss of viability of some organisms, or may lead to overgrowth by contaminating organisms.

General procedure

Action	Rationale
Explain and discuss procedure with patient	Ensure patient understands procedure and gives consent
Decontaminate hands appropriately	Reduce the risk of infection transmission Minimise contamination
Place specimens and swabs in appropriate, correctly labelled containers	To ensure organisms for investigation are preserved. To ensure correct results are attributed to correct patient
Send specimens to laboratory promptly, with fully completed request form.	

If specimens cannot be sent to a laboratory immediately, they should be stored as follows:

- Blood culture samples in a 37°C incubator
- All other specimens in a specimen refrigerator at a temperature of 4°C, where the low temperature will slow the bacterial growth

Resources available

1. **Swabs – microbiology**
   Black or blue topped swabs with transport media: Use for all swab samples unless specifically stated otherwise. Dry swabs should not be sent as this can limit pathogen survival.

   Other specimens should be placed into sterile containers.

2. **Swabs – virology**
   Swabs for viral culture/PCR should be placed into the pink virus transport media, available from the microbiology department.

3. **Chlamydia**
   Swabs should be placed into the pink virus transport media, available from the microbiology laboratory.

   Urine should be sent in sterile white topped containers. Boric acid (red-topped universals) samples are not suitable for Chlamydia.

4. **Mycology**
   Special transport envelopes available from microbiology laboratory.

Specifics on specimen collection.

Where possible all specimens should be taken prior to commencing antimicrobial therapy.

Site/Specimen	Action	Comments
Eye swab	1 Gently evert lower eyelid. Using swab held parallel to cornea gently rub conjunctiva of lower eyelid. 2 Chlamydia swab if required should be taken after bacterial swab.	In all but superficial eye infections corneal scrapings may be required. Please discuss with opthamology. If both eyes to be swabbed a separate swab should be used for each.
Ear swab	Place swab into outer ear and rotate gently.	No drops/antibiotics/other chemotherapeutic agents should have been used in the aural region for 3 hours prior to taking the swab.
Nose swab	1. Moisten swab with sterile saline or transport media swab the anterior nares by gently rotating swab. 2. The same swab can be used for both nostrils.	
Pernasal swab	1. Pass special soft mounted wire swab along the floor of the nasal cavity, to the posterior wall of the nasopharynx. 2. Rotate gently.	Swabs can be obtained from the microbiology department. Care needs to be taken to minimise trauma and to ensure the correct area is sampled.
Throat swab	1. The patient should stick out their tongue whilst the swab is guided down the side of the throat to make contact with the tonsillar fossa or any other area with a lesion or exudates. 2. If concerns re atypical pneumonia/viral infections a throat swab should be sent in virus transport media.	A tongue depressor may be required. Avoid touching any other area of the mouth or tongue in order to minimize contamination.

Site/Specimen	Action	Comments
Sputum	1. Ensure specimen is sputum, not saliva. 2. Encourage patients who have difficulty producing sputum to cough deeply first thing in the morning. 3. Physiotherapy may also be helpful in getting a sample.	Send sputum to lab immediately – delays can lead to overgrowth of contaminating flora, and the death of potentially pathogenic flora.
Wound swab	1. Do not routinely sample wounds/ulcers – only sample if infection suspected. 2. Take swabs prior to dressing. 3. Rotate swab gently over area to be sampled.	Pus, if present should be sent in preference to a swab – send in a sterile screw capped container.
Ulcer swab	1. Clean chronic ulcers with sterile saline or tap water prior to sampling. 2. Slough and necrotic tissue should be removed. 3. Sample viable tissue with signs of inflammation, gently rotating the swab.	Do not sample routinely.
High Vaginal swab	1. Introduce speculum into vagina to separate the vaginal walls. 2. Roll swab over vaginal vault sampling the lateral and posterior fornices.	High vaginal swabs are the idea – avoid contamination with vulval/skin flora by use of a speculum.
Endocervical swab	1. Introduce speculum into vagina to obtain a clear view of cervix. 2. Swab should be rotated gently in the endocervicalos. 3. If testing for Chlamydia, a second swab should be taken and placed in viral transport media.	Avoid touching vaginal walls to minimise contamination. Chlamydia swabs should be rotated a little more firmly as seeking to collect epithelial cells.
Penile swab	1. Retract prepuce. 2. Gently rotate swab in urethral meatus. 3. If gonorrhoea is suspected, send a swab from the distal 1-2cm of the urethra.	Gently insert and rotate swab. Send to lab promptly in transport media.

Site/Specimen	Action	Comments
Rectal swab	1. Pass swab carefully through anus into rectum. 2. Rotate gently. 3. If threadworms suspected take swab from perianal region, and break off into bijou of sterile saline (available from lab). Alternatively take sellotape slide.	Aiming to minimise trauma and ensure a rectal (and not anal) sample is taken. Threadworms lay their ova on perianal skin. Sellotape slides are taken by pressing a piece of sellotape to the perianal skin, and placing onto a microscope slide. They are best taken first thing in the morning.
Faeces	1. Where possible, ask the patient to defaecate into a clinically clean bedpan. 2. Scoop enough material to fill a third of the specimen container using the spatula / spoon. (If liquid faeces, approximately 15mls should be collected). 3. Segments of tapeworm that are seen easily in faeces should be sent to the laboratory for identification. 4. Patients suspected of suffering from amoebic dysentery should have any stool specimens dispatched to the laboratory immediately. Notifying the laboratory when sending.	Aiming to minimise contamination. If patient is collecting sample at home advise to avoid contamination with urine/disinfectants, and to label clearly. If ova/cysts/parasites suspected, up to 3 samples over the space of a week may be required to improve detection rates. The parasite causing amoebic dysentery is characteristic in its fresh state, but is difficult to identify when dead.
Urine	1. Specimens of urine should be collected as soon as possible after the patient wakens in the morning and at the same time each morning if more than one specimen is required. 2. Dispatch all specimens to the laboratory as soon after collecting as possible.	The bladder will be full due to overnight accumulation of urine. Later specimens may be diluted. Urine samples should be examined within 2 hours of collection, or refrigerated. At room temperature bacterial overgrowth will occur and may lead to misinterpretation.

Site/Specimen	Action	Comments
Midstream specimen of urine (male)	1. Retract the prepuce and clean the skin surrounding the urethral meatus with water. 2. Ask the patient to direct the first and last part of his stream into a urinal or toilet but to collect the middle part of his stream into a sterile container.	Aiming to prevent contamination.
Urine for Chlamydia	1. First void urine of the day should be placed into a sterile container (White topped). 2. If first void not collected, wait until patient has not micturated for 2hours, then collect first void.	Do not use boric acid containers.
Midstream specimen of urine (female)	1. Clean the urethral meatus with water. 2. Use a separate gauze swab for each cleansing swab. Clean from the front to the back. 3. Ask the patient to micturate into a bedpan or toilet. Place a sterile receiver or a wide mouthed container under the stream and remove before the stream ceases. 4. Transfer the specimen into a sterile container.	Aiming to prevent contamination, particularly with perianal flora.
Vomit	1. Preferable: Viral Swab - wet swab with vomit and place in viral transport medium 2. If no viral transport immediately available, collect small amount of vomit where practicable [minimum 1ml] in Universal container 3. Ensure outside of any transport containers used are free from contamination	For Norovirus only Do not use boric acid containers

Analysis of antibiotic levels

Detailed information on antibiotic levels is given in NHS Borders 'Antimicrobial guidelines for hospitals'

Specimens not covered

Further information on specimen collection is available in the laboratory handbook:

http://intranet/microsites/index.asp?siteid=64&uid=5

For specimens not covered by these policies, please discuss with Microbiology.

4.3 SCABIES POLICY

Standards Aim: Ensure that persons with scabies are identified and treated appropriately

- diagnosis must be made by appropriately trained medical or nursing staff
- further advice can be obtained by contacting a member of the IPCT
- with atypical cases, referral to a dermatologist is strongly recommended.

General Information
The tiny mite, which causes scabies, can only live for a short time away from the human host. It requires warmth and moisture for survival. Scabies is usually acquired by close, prolonged, skin to skin contact with an infected person. All suspected cases should be reported to the Infection Control Nurse.

What to Look For
Raised burrows in the epidermis of the wrists, backs of hands, between fingers, occasionally elbows, axillae, waist, groins, genitalia, buttocks, ankles and behind the knees.

Infection does not generally occur in the skin of the face or scalp.

The most common symptom is a widespread itchy rash, which is particularly severe at night time or when the body is warm, e.g. after exercise or a warm bath.

To aide diagnosis, skin scrapings can be taken from affected areas in order to look for evidence of mite infestation.

Classic scabies: Widespread, bilateral rash, which can affect almost any part of the body but not centre of chest, centre of back or head.

Atypical scabies: The presentation may vary from classical scabies in certain patient groups, e.g. previously treated or immunocompromised patients.
Often goes unrecognised until large numbers of people are affected.

Crusted/Norwegian scabies: May occur in immuno-compromised individuals. Skin becomes scaly and crusted because of the presence of thousands of mites. There is no associated rash or itch. These patients are highly infectious and require isolation.

1. MANAGEMENT [the following guidance is *specific* to scabies and some only applicable to the hospital inpatient; other precautions may have to be taken following assessment of patient)	
Spread	Direct skin-to-skin contact, but can be transmitted via skin scales on bedding, clothing and soft furnishings.
Single room	Not always required; risk assessment must be performed based on likelihood of transmission in the care environment.
PPE	**Plastic Apron:** must be worn by all members of staff having contact with patient/ linen and immediate patient environment. **Gloves:** must be worn by all members of staff having contact with patient/ linen and immediate patient environment. **Facial Protection:** unnecessary for scabies.
Hand Hygiene	After contact with patient, contaminated articles or patients immediate environment. Gloves should be removed and hands washed and dried thoroughly. Instruct patient in hand washing technique as condition allows.
Linen	Treat linen as infected linen. (See Linen Policy)
Crockery, cutlery and medicine cups	Medicine cups are single-use disposable. Routine domestic hot wash for other reusable items.
Clinical Waste	Routine disposal, unless otherwise indicated.
Cleaning of room	Routine cleaning, unless otherwise indicated.
Baths/ showers	Routine cleaning, unless otherwise indicated.
Charts	Not applicable unless patient requires isolation. (See Isolation policy)
Laboratory specimens	See section 4.2. Routine collection and transport sufficient unless otherwise indicated.
Transporting patients	Receiving units must be informed of patient's status and any precautions required.
Visitors	Instruct visitors on correct precautions to take.
Terminal cleaning	Not required unless otherwise indicated; routine discharge cleaning sufficient.

2. TREATMENT	
Anyone diagnosed with scabies must be treated: apply scabicide (Contact Pharmacy for current product and follow manufacturer's recommendations). Scabies remains infectious until treated.	
Classic scabies	Don disposable apron and gloves. Apply treatment to clean dry skin (no bath necessary if skin is visibly clean). NB: If bath has been taken, dry the skin thoroughly and allow temperature to return to normal before applying scabicide. Apply systematically from neck to feet paying particular attention to folds of skin, high risk, and visibly affected areas. Leave on skin for duration recommended by manufacturer, usually overnight Re-apply product to skin surfaces that are washed during the treatment period, dependant on manufacturer's instructions. Dispose of PPE into yellow clinical waste bag and wash hands. Manage linen as infected for a further 48 hours after completion of treatment.
Atypical scabies	Follow as for classical scabies but treatment should include the head, paying particular attention to ears and taking care to avoid the immediate vicinity around the eyes and mouth. A second treatment is advisable to kill newly hatched mites. Follow recommended time interval for the product.
Crusted/Norwegian scabies	Treat as for atypical scabies. Additional staff protection may be required. Contact IPCT for advice.
If symptoms persist after initial treatment contact IPCT for advice.	
Staff	If concerned, contact Occupational Health and Safety Department for advice. See also Scabies - Staff Guidelines.
Visitors	Visitors who have had close contact with the infected patient within the last 2 months should also be considered for treatment.

4.4 HEAD LICE POLICY

Aim: To provide advice on the rational use of head lice treatments in tandem with effective detection and preventative measures

Standards

- diagnosis must be made by appropriately trained medical or nursing staff
- further advice can be obtained by contacting a member of the IPCT.

General Information

Head lice are a common problem, which can affect a whole community, adults and children alike. Effective management of head lice infection depends on the ability of all relevant professionals and agencies to offer clear, accurate and impartial advice.

The adult head louse is very small (2-3mm in length) with the females being slightly larger than the males. They live close to the scalp and move about the head rapidly by gripping the hair with their claws. They have antennae, which are temperature sensitive and keep them close to the body's warmth.

Head lice actually prefer clean hair and are oblivious to socio-economic status. Patients should be advised of this to avoid stigma.

The female lays approximately 8 eggs daily (often at night) which are cemented firmly on to the hair shaft close to the scalp.

Eggs hatch within 7 to 10 days leaving the empty shells (nits) attached firmly to the hair.

The young lice (nymphs) feed by piercing the skin of the host and sucking blood. When they pierce the skin they inject saliva containing anaesthetic and anticoagulant so that the host blood can be sucked freely without the host experiencing pain. Lice feed about six times a day.

The nymphs can change colour once after they have hatched to blend to the colour of the host's hair. If they move to another host they are unable to change colour again.

The nymphs develop into sexually active adults within 10 days moulting three times as they grow. The adult louse may live for up to four to six weeks and the female may lay up to 300 eggs in her lifespan.

What to Look For:

There are a number of tell-tale signs, which are indicative of head lice infection:

- black gritty powder on collars and pillows - this is faecal matter from the lice

- cast skins on combs, pillows, chair backs etc. - these look similar to lice

- dead or dying lice floating on the surface of the water when the hair has been washed. These can be removed with a tissue for closer inspection

- persistent itching of the scalp. This is caused by an allergic reaction to the head louse saliva. It may take two to three months for the itch to develop the first time a person is infected with head lice although subsequent infections result in the itch developing more rapidly

- the presence of tiny white empty egg shells (nits) attached to the hair is indicative of head lice infection. The hair grows at about 1cm per month and therefore the distance the nit is from the scalp gives an indication of how long ago it was laid.

The hair should ideally be checked once a week using a proper detector comb on damp hair, [See also the 'bug busting' method]

The hair may either be divided into sections and carefully combed from the roots to the ends or combed forward from the nape of the neck to the forehead.

The hair should be combed over a piece of white paper or cloth to help identify any lice or nits which are combed out.

1. MANAGEMENT [the following guidance is *specific* to head lice and some only applicable to the hospital inpatient; other precautions may have to be taken following assessment of patient]	
Spread	Direct contact with the head of an infected person. Lice cannot jump or fly but can move readily through dry hair and can cross from person to person when heads touch.
Single room	Not always required; risk assessment must be performed based on likelihood of transmission in the care environment.
PPE	**Plastic Apron:** must be worn by all members of staff having contact with patient/ linen and immediate patient environment. **Gloves:** must be worn by all members of staff having contact with patient/ linen and immediate patient environment. **Facial Protection:** unnecessary for head lice.
Hand Hygiene	After contact with patient, contaminated articles or patients immediate environment. Gloves should be removed and hands washed and dried thoroughly. Instruct patient in hand washing technique as condition allows.
Linen	Treat linen as infected linen. (See Linen Policy).
Crockery, cutlery and medicine cups	Medicine cups are single-use disposable Routine domestic hot wash for other reusable items.
Clinical Waste	Routine disposal, unless otherwise indicated.
Cleaning of room	Routine cleaning, unless otherwise indicated.
Baths/ showers	Routine cleaning, unless otherwise indicated.
Charts	Not applicable unless patient requires isolation. Refer to isolation policy.
Laboratory specimens	See section 4.2. Routine collection and transport sufficient unless otherwise indicated.
Transporting patients	Receiving units must be informed of patient's status and any precautions required.
Visitors	Instruct visitors on correct precautions to take.
Terminal cleaning	Not required unless otherwise indicated; routine discharge cleaning sufficient.

2. TREATMENT
Hair should only be treated if there is evidence of head lice infection. Only currently, recommended insecticide preparations should be used. Bug Busting approach: see NHS Borders Head Lice Policy for more details. For detection a proper plastic detector comb must be used. Metal ones are unsuitable for detection as they miss small nymphs, cause damage to hair and are designed for the removal of empty egg shells (nits).
For information on current recommended preparations please contact the Pharmacy Department. These products should be applied following the manufacturers instructions.
Enough product should be used to provide complete cover of the scalp and hair. Particular attention should be paid to the areas behind the ears, at the nape of the neck and under the fringe as these areas tend to be warmer and may be more attractive to the lice.
The product should be left on for the recommended time.
Following treatment with either preparation, dead lice and eggs may be removed using a fine toothed comb on the damp hair. Commercial cosmetic preparations are available which are promoted as loosening the cement on nits and eggs.
The hair should be checked thoroughly one week after treatment. Preparations are generally highly effective but if viable lice are found after a week, the treatment should be repeated carefully. Treatment may also fail from either incomplete application of the original preparation or from re-infection from another infected person.
Close contacts of the infected person should have their hair checked on the same day as infection was originally identified if possible and if any signs of infection are found they should also receive treatment.
Shampoos are not recommended for the treatment of head lice. In use they are too dilute to be fully effective and are unable to kill the eggs. Thus repeated applications may be necessary to be effective and there is a greater risk of the lice developing resistance to more dilute formulations as well as increased risk of skin sensitivity.
Patients with asthma, eczema or psoriasis should not use an alcohol based lotion. The alcohol fumes may precipitate an asthma attack and the alcohol in the lotion may irritate sensitive or excoriated skin.

3. CONTACT TRACING
Contact Tracing is vital to prevent re-infection with head lice. It is now generally accepted that, although head lice infection is often originally identified in school children, the condition is frequently spread in the community by asymptomatic adults such as parents, grandparents and others. The very young and the very old tend to be less likely to develop the itch associated with head lice infection and so may remain asymptomatic indefinitely.
It is unlikely that a fleeting contact with an infected head will spread infection. It can take up to one minute for the space between two touching heads to warm up sufficiently to permit lice to move from head to head.
When a case of head lice infection has been identified, all those who are likely to have had close physical contact with that person should be advised to have their hair checked as soon as possible using a detector comb.
Those contacts who are also found to be infected should have their hair treated as soon as possible using an appropriate insecticide, ideally at the same time as the original person is being treated.
Only those who are infected be treated. This helps to minimise the development of resistance to the insecticides and the exposure of people to insecticides when they are not necessary.
If a child has been found to be infected with head lice, the child's school or playgroup must be informed by the parent.
4. PREVENTION
Regular brushing and combing of the hair can damage lice by e.g. breaking their legs resulting in the lice no longer being viable. Regular grooming is therefore recommended to help reduce the risk of infection developing.
Checking the hair regularly with a detector comb is the best way of preventing the development of head lice infection by identifying and treating any infection early.

If concerned, contact Occupational Health / IPCT for advice.

4.5 BODY & PUBIC LICE POLICY

Aim: To provide advice on the treatment & management of body & pubic lice treatments in tandem with effective detection and preventative measures

Standards

- diagnosis must be made by appropriately trained medical or nursing staff
- further advice can be obtained by contacting a member of the IPCT.

General Information

Body lice infect the hairy parts of the body and clothing (especially along the seams of the inner surface) with adult lice, larvae and nits. They are capable of living for a limited time in infected clothing.

Pubic lice usually infect the pubic hair area but may also infect hair of the face (including eyelashes) axillae and other hairy body surfaces. Pubic lice are temperature dependent and generally exist only for a short time away from the host.

What to Look For

- evidence of adult lice, larvae or nits in hairy areas and / or clothing
- severe itching and excoriation of the body
- secondary infection may occur
- there may be bites at areas closest to underclothes.

Incubation Period

Approximately 17 days. Eggs of lice hatch in a week in optimal conditions and reach maturity in 8-10 days.

The detection and subsequent management of body and pubic lice infection demands tactful and sensitive management by all professionals concerned.

1. MANAGEMENT [the following guidance is *specific* to body and pubic lice and some only applicable to the hospital inpatient; other precautions may have to be taken following assessment of patient]	
Spread	Direct contact with an infected person, indirect contact with their personal belongings especially shared clothing. Pubic lice are frequently transmitted through sexual contact.
Single room	Not always required; risk assessment must be performed based on likelihood of transmission in the care environment.
PPE	**Plastic Apron:** must be worn by all members of staff having contact with patient/ linen and immediate patient environment **Gloves:** must be worn by all members of staff having contact with patient/ linen and immediate patient environment **Facial Protection:** unnecessary for body or pubic lice
Hand Hygiene	After contact with patient, contaminated articles or patients immediate environment. Gloves should be removed and hands washed and dried thoroughly. Instruct patient in hand washing technique as condition allows.
Linen	Treat linen as infected linen. (See Linen Policy).
Crockery, cutlery and medicine cups	Medicine cups are single-use disposable Routine domestic hot wash for other reusable items.
Clinical Waste	Routine disposal, unless otherwise indicated.
Cleaning of room	Routine cleaning, unless otherwise indicated.
Baths/ showers	Routine cleaning, unless otherwise indicated.
Charts	Not applicable unless patient requires isolation. Refer to isolation policy
Laboratory specimens	See section 4.2. Routine collection and transport sufficient unless otherwise indicated.
Transporting patients	Receiving units must be informed of patient's status and any precautions required.
Visitors	Instruct visitors on correct precautions to take.
Terminal cleaning	Not required unless otherwise indicated; routine discharge cleaning sufficient.

3. TREATMENT	
Lice remain infectious until treated; period of communicability lasts as long as lice and eggs remain alive on the infected person and/or clothing.] Contact Pharmacy for current product and follow the manufacturer's recommendations. **NB Patients with asthma may require a different preparation to the one usually recommended.**	
• wear disposable apron and gloves. Apply lotion as per manufacturers instructions • dispose of protective clothing in yellow clinical waste bag, wash & dry hands • after treatment period is over wash off lotion wearing protective clothing • dispose of protective clothing in yellow clinical waste bag, wash & dry hands • treat linen and clothing as infected as per local policy for up to 24 hours after treatment is discontinued.	
Since pubic lice are sexually transmitted the patient should be advised to consider a referral to the GUM department for further screening tests	
If symptoms persist after initial treatment contact IPCT for advice.	
Staff	If concerned, contact Occupational Health Service for advice. See also Scabies - Staff Guidelines.
Visitors	**Close Contacts** Should seek advice from their own GP. Clothing and linen to be washed in a dedicated hot water cycle of an automatic washing machine and tumble dry/iron or dry clean. *(Manufacturers washing instructions should be followed to prevent unnecessary damage to clothing).*

4.6 PET POLICY

Aim: Health hazards due to pets/animals are minimised by the adoption of appropriate control measures

1. **Introduction**

   The value of pet therapy is widely accepted as a powerful aid to stimulation and communication, pets can also enhance the quality of life of the elderly or those with chronic disease.

   It is well documented that diseases can be acquired from a variety of normal domestic pets. These policy guidelines will help reduce the risks of animal-borne or animal vector infection to staff, patients and visitors.

2. **Standards**

   Resident or visiting (except guide dogs) animals must be approved and advice sought from NHS Borders Infection Prevention Control Team/Health Protection Nurse Specialist (Infection Control for the independent sector) and the appropriate Clinical Service Manager/Clinical Development Manager.

   When considering pet therapy it is important to acknowledge that not all people are comfortable with animals, and the responsibility for keeping pets is not to be undertaken lightly. Consideration should also be given that some staff and patients may have an allergy to animals.

   Health and Safety pertaining to animals in the clinical setting must also be addressed before the animals are introduced into the area, contact NHS Borders Health and Safety Advisor.

   Funding for the care of pets (including veterinary fees) must be identified.

   Breeding of animals is not permitted and resident pets such as cats and dogs should be neutered.

   It is advised that tropical fish are not permitted.

   Pets within the In-patient areas of the Borders General Hospital or other High Risk areas will not normally be permitted. Please seek advice from the Infection Prevention & Control Team.

3. Responsible Person

A named member of staff must be designated by the Charge Nurse as the person responsible for the welfare of the animal. This includes feeding, grooming and health care of pet(s).

A register of pets and the person responsible for their welfare should be kept by the Head of Service or a designated person nominated by the Head of Service.

4. Veterinary Advice

The responsible person must make initial contact with a veterinary surgeon (preferably local) to receive advice on general care, diet, immunisation, de-worming, dealing with fleas / mites etc, and, if appropriate, screening. Veterinary surgeons are very interested in health promotion. [Note: this is with the exception of fish].

The responsible person should keep a record of vaccinations and/ or treatments received, including programmes of disinfestation and de-worming.

5. Pet Care

Staff must wear personal protective equipment i.e. disposable gloves and apron when dealing with pets or their equipment. Pets should be fed in a non-patient area (with the exception of fish and caged birds).

Food bowls, can opener and utensils should be washed immediately after use in warm water and detergent using a disposable cloth / paper towel then dried thoroughly with a paper towel. They must be washed and kept separate from patients' crockery and cutlery. Can openers used for pet foods should never be used for opening containers of food destined for human consumption.

Litter tray (if needed) must be kept in a non-patient area. Proprietary litter should be used and changed daily by a member of staff designated the responsible person. Disposable gloves and aprons must be worn and hands washed on completion of task. When necessary, litter trays should be washed out of doors.

Pregnant staff must not handle litter trays.

Litter, pet food, can opener and utensils should be stored in a designated cupboard in a non-patient area. Open cans must be resealed using a plastic lid.

The responsible person should ensure that the pets bedding is kept clean to reduce the risk of infection. Pets are not permitted to sleep on patients' beds.

Cats should wear an identification collar (stating ward, hostel etc. of residence).

6. Hand Hygiene

All staff and patients must thoroughly wash their hands with soap and water after handling an animal or any of its equipment, food or bedding.

Hand washing is particularly important after contact with tropical fish or with fish tank water.

7. Therapeutic pet schemes

The senior member of nursing staff on duty at the time of the Therapeutic pet visit must ensure that her/his ward is part of the current NHSB approved scheme before allowing the pet onto the ward to have patient contact. They must also ensure that good hand hygiene and infection control principles are adhered to.

Pets must not be brought into ward areas such as those within Borders General Hospital. Furthermore, it is generally preferred for pets to be met within communal patient areas such as the day rooms; if further advice is required, please contact a member of the Infection Prevention Control Team.

4.7 TRANSMISSIBLE SPONGIFORM ENCEPHALOPATHIES

1. Introduction

Transmissible spongiform encephalopathies (TSEs), otherwise known as prion diseases, are rare, fatal, degenerative diseases affecting the central nervous system (CNS), that occur in humans and certain other mammals.

There are several recognised TSEs, including Creutzfeldt-Jakob Disease (CJD) in humans, bovine spongiform encephalopathy (BSE) in cattle and scrapie in sheep.

TSEs are in many ways unique, and exhibit biological properties that are different from those of other microbiological diseases. Specific diagnostic criteria have been developed. More information on these can be found at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/209761/Annex_B_-_Diagnostic_criteria.pdf

Some of the important features relevant to occupational exposure are summarised below:

TSEs are caused by unconventional infectious agents currently thought to be infectious proteins (apparently without nucleic acid) known as prions which do not share the normal properties of viruses or bacteria. The CNS contains the highest levels of infectivity which is associated with accumulation of a modified host-encoded protein, prion protein. In TSEs, prion protein undergoes a structural change (involving re-folding) to a conformer with an increased beta – sheet structure. This conformational change renders the abnormal prion protein more resistant to degradation, and is associated with infectivity. The abnormal form of prion protein is only found in TSEs, but the mechanism and site of its conversion are still uncertain.

A common feature of all TSEs is the appearance of microscopic vacuoles in the grey matter of the CNS, giving a sponge-like appearance, from which the conditions derive their name. This change is accompanied by the accumulation of the abnormal form of the prion protein in the CNS.

The commonest form of CJD occurs as a sporadic disease, the cause of which is unknown, although genetic factors (particularly the codon 129 polymorphism in the prion protein gene (*PRNP*)) influence disease susceptibility. The familial forms of human TSEs appear to have a solely genetic origin and are closely associated with mutations or insertions in

the *PRNP* gene. Most, but not all, of the familial forms of human TSEs have been transmitted experimentally to animals. There are no known familial or genetic TSEs of animals, although polymorphisms in the *PRNP* gene of some species (sheep for example) may influence the length of the incubation period and occurrence of disease.

Although TSEs are not contagious, they are experimentally transmissible by inoculation and in some cases by oral challenge. Some animal TSEs, such as scrapie, are naturally transmissible to sheep and goats and chronic wasting disease (CWD) is naturally transmissible to several North American species of deer and elk, but how this is affected is still uncertain. Transmissible mink encephalopathy (TME) and BSE are feed-borne diseases. Transmission of TSEs to humans has occurred from both human and bovine sources, resulting in iatrogenic CJD and variant CJD respectively (see Table 1). Other animal TSEs, including scrapie, do not appear to cause human disease.

TSE agents are not uniformly distributed in the tissues of affected individuals and infectivity levels vary at different stages of incubation. In general, during the clinical disease, CNS tissues (including the retina) pose the highest risk, lymphoid tissues, cornea and dura mater are lower risk and most body fluids and other tissues negligible risk (for more detail see Tables 2 and 3).

TSE agents exhibit an unusual resistance to conventional chemical and physical decontamination methods. They are not significantly affected by disinfectants like formalin and ethylene oxide, and infectivity persists after standard autoclaving (e.g. 134°C for 3 minutes). They are also extremely resistant to high doses of ionising and UV irradiation and some residual activity has been shown to survive for long periods in the environment.

All TSEs are invariably progressive and fatal once clinical signs appear; there is currently no known effective treatment or prophylaxis, although this is an area of active research and clinical trials in humans have been established.

There have been no confirmed cases of transmission of TSE to humans as a result of occupation. If TSEs could be transmitted in the occupational setting this would be most likely to occur from exposure to infected tissues or materials by direct inoculation (e.g. puncture wounds, 'sharps' injuries or contamination of broken skin), by splashing of the mucous membranes or, exceptionally, by swallowing.

2. Tissue infectivity

Appendix 1 contains information on the distribution of TSE infectivity in human tissues and body fluids.

3. Iatrogenic transmission

There is no evidence to suggest that CJD/vCJD are spread from person-to-person by close contact, though it is known that transmission of CJD/vCJD can occur in specific situations associated with medical interventions – iatrogenic infections. Due to the possibility of iatrogenic transmission of CJD/vCJD, precautions need to be taken for certain procedures in healthcare, to prevent transmission.

Iatrogenic transmission of CJD has occurred by:

- administration of hormones prepared from human pituitary glands
- dura mater preparations
- corneal grafting (it is possible that in the one definite case corneal tissue was contaminated by posterior segment tissue during processing)
- neurosurgical procedures with inadequately decontaminated instruments or EEG needles.

Iatrogenic transmission of vCJD has occurred by:

- blood transfusion of non-leucodepleted red blood cells
- probable asymptomatic VCJD transmission has occurred via plasma products in a haemophiliac.

No known transmissions of vCJD have occurred via surgery or use of tissues or organs.

4. Patient categorisation

When considering measures to prevent transmission to patients or staff in the healthcare setting, it is useful to make a distinction between:

- symptomatic patients, i.e. those who fulfil the diagnostic criteria for definite, probable or possible CJD or vCJD (see Table 1 for full diagnostic criteria), and;
- patients “at increased risk” i.e. those with no clinical symptoms, but who are “at increased risk” of developing CJD or vCJD, because of their family or medical history. For this group of patients, the infection prevention and control advice differs in some circumstances for:
    - patients at increased risk of genetic CJD

- patients at increased risk because they have received blood from an individual who later developed variant CJD
- other patients at increased risk of iatrogenic CJD.

5. Patients "at increased risk" of CJD or vCJD

A number of patients have been identified as "at increased risk" of CJD or vCJD on the recommendation of the CJD Incidents Panel due to a medical or family history which places them "at increased risk" of developing CJD or vCJD. These patient groups are outlined in Table 1.

In most routine clinical contact, no additional precautions are needed for the care of patients in the "increased risk" patient groups. However, when certain invasive interventions are performed, there is the potential for exposure to the agents of TSEs. In these situations it is essential that control measures are in place to prevent iatrogenic CJD/vCJD transmission.

All people who are "at increased risk" of CJD/vCJD are asked to help prevent any further possible transmission to other patients by following this advice:

- don't donate blood. No-one who is "at increased risk" of CJD/vCJD, or who has received blood donated in the United Kingdom since 1980, should donate blood;
- don't donate organs or tissues, including bone marrow, sperm, eggs or breast milk;
- If you are going to have any medical, dental or surgical procedures, tell whoever is treating you beforehand so they can make special arrangements for the instruments used to treat you if you need certain types of surgery or investigation
- you are advised to tell your family about your increased risk. Your family can tell the people who are treating you about your increased risk of CJD/vCJD if you need medical or surgical procedures in the future and you are unable to tell them yourself.

GPs are asked to record their patient's CJD/vCJD risk status in their primary care records. The GP should also include this information in any referral letter should the patient require surgical, medical or dental procedures.

Table 1 Categorisation of patients by risk	
Symptomatic patients	Patients who fulfill the diagnostic criteria for definite, probable or possible CJD or vCJD (see Annex B for diagnostic criteria). https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/209761/Annex_B_-_Diagnostic_criteria.pdf Patients with neurological disease of unknown aetiology, who do not fit the criteria for possible CJD or vCJD, but where the diagnosis of CJD is being actively considered.
Patients identified as "at increased risk" of genetic forms of CJD	Individuals who have been shown by specific genetic testing to be at significant risk of developing CJD. Individuals who have a blood relative known to have a genetic mutation indicative of genetic CJD. Individuals who have or have had two or more blood relatives affected by CJD or other prion disease.
Patients identified as "at increased risk" of vCJD through receipt of blood from a donor who later developed vCJD	Individuals who have received labile blood components (whole blood, red cells, white cells or platelets) from a donor who later went on to develop vCJD.
Patients identified as "at increased risk" of CJD/vCJD through iatrogenic exposures	Recipients of hormone derived from human pituitary glands, *e.g*. growth hormone, gonadotrophin, are "at increased risk" of transmission of sporadic CJD. In the UK the use of human-derived gonadotrophin was discontinued in 1973, and use of cadaver-derived human growth hormone was banned in 1985. However, use of human-derived products may have continued in other countries after these dates. Individuals who underwent intradural brain or intradural spinal surgery before August 1992 who received (or might have received) a graft of human-derived dura mater are "at increased risk" of transmission of sporadic CJD (unless evidence can be provided that human-derived dura mater was not used).

	Individuals who have had surgery using instruments that had been used on someone who went on to develop CJD/vCJD, or was "at increased risk" of CJD/vCJD. Individuals who have received an organ or tissue from a donor infected with CJD/vCJD or "at increased risk" of CJD/vCJD. Individuals who have been identified as having received blood or blood components from 300 or more donors since January 1990. Individuals who have given blood to someone who went on to develop vCJD. Individuals who have received blood from someone who has also given blood to a patient who went on to develop vCJD. Individuals who have been treated with certain implicated UK sourced plasma products between 1990 and 2001.

Recipients of ocular transplants including corneal transplants are not considered to be "at risk" of CJD/vCJD.

6. Hospital care of CJD/vCJD patients

There is no evidence that normal social or routine clinical contact of a CJD/vCJD patient presents a risk to healthcare workers, relatives and others. Isolation of patients with CJD/vCJD is not necessary, and they can be nursed in an open ward using standard infection prevention and control precautions in line with those used for all other patients.

a) Sample taking and other invasive medical procedures

When taking samples or performing other invasive procedures, the possible infectivity of the tissue(s) involved must be considered, and if necessary suitable precautions taken. Information on tissue infectivities for CJD/vCJD is included in Appendix 1.

It is important to ensure that only trained staff, who are aware of the hazards, carry out invasive procedures that may lead to contact with medium or high risk tissue.

Body secretions, body fluids (including saliva, blood and cerebrospinal fluid (CSF) and excreta) are all low risk for CJD/vCJD. It is therefore likely that the majority of samples taken or procedures performed will be low risk. Contact with small volumes of blood (including inoculation injury) is considered low risk, though it is known that transfusion of large volumes of blood and blood components may lead to vCJD transmission.

Blood and body fluid samples from patients with, or "at increased risk" of, CJD/vCJD, should be treated as potentially infectious for blood-borne viruses and handled with standard infection prevention and control precautions as for any other patient.

When taking biopsy specimens of medium or high risk tissue, for example tonsil biopsy in a patient with suspected vCJD, or intestinal biopsy in a patient "at increased risk" of vCJD, every effort should be taken to minimise the risk of infecting the operator or contaminating the environment.

Samples from patients with, or "at increased risk" of, CJD/vCJD should be marked with a 'Biohazard' label, and it is advisable to inform the laboratory in advance that a sample is being sent.

b) Spillages

Standard infection prevention and control precautions should be followed for any spillages, which should be cleared up as quickly as possible, keeping contamination to a minimum. Disposable gloves and an apron should be worn when removing such spillages.

For spillages of large volumes of liquid, absorbent material should be used to absorb the spillage.

Standard disinfection for spillages (e.g. 10,000ppm chlorine-releasing agent) should be used to decontaminate the surface after the spillage has been removed. A full risk assessment may be required.

Any waste (including cleaning tools such as mop heads and PPE worn) should be disposed of as clinical waste

c) Clinical Waste

All clinical waste should be placed in yellow clinical waste bags and disposed of by incineration as indicated in the clinical waste policy.

d) Childbirth

In the event that a patient with, or "at increased risk" of, CJD or vCJD becomes pregnant, it is important to ensure that patient confidentiality

is properly maintained, and that any action taken to protect public health does not prejudice individual patient care.

Childbirth should be managed using standard infection prevention and control procedures. The placenta and other associated material and fluids are designated as low risk tissues, and should be disposed of as clinical waste, unless they are needed for investigation.

e) Bed linen

Used or fouled bed linen (contaminated with body fluids or excreta), should be washed and dried in accordance with current standard practice. No further handling or processing is necessary.

f) Occupational exposure

Although cases of CJD/vCJD have been reported in healthcare workers, there have been no confirmed cases linked to occupational exposure. However, it is prudent to take a precautionary approach.

The highest potential risk in the context of occupational exposure is from exposure to high infectivity tissues through direct inoculation, for example as a result of sharps injuries, puncture wounds or contamination of broken skin, and exposure of the mucous membranes.

Healthcare personnel, who work with patients with definite, probable or possible CJD/vCJD, or with potentially infected tissues, should be appropriately informed about the nature of the risk and relevant safety procedures.

Compliance with standard infection prevention and control precautions, in line with those set out in "Guidance for Clinical Health Care Workers: Protection Against Infection with Blood-borne Viruses" recommended by the Expert Advisory Group on AIDS and the Advisory Group on Hepatitis will help to minimise risks from occupational exposure.

For any accident involving sharps or contamination of abrasions with blood or body fluids, wounds should be gently encouraged to bleed, gently washed (avoid scrubbing) with warm soapy water, rinsed, dried and covered with a waterproof dressing, or further treatment given appropriate to the type of injury. Splashes into the eyes or mouth should be dealt with by thorough irrigation. All adverse events must be reported via Datix, in accordance with the Adverse Event Policy. Please see the Occupational Health Policies:

Policies on Blood Borne Virus Infected Healthcare Workers
Needlestick/ Sharps/ Contamination Policy

7. Surgical procedures and instrument management

For all patients with, or "at increased risk" of, CJD or vCJD, the following precautions should be taken for surgical procedures:

- wherever appropriate and possible, the intervention should be performed in an operating theatre
- where possible, procedures should be performed at the end of the list, to allow normal cleaning of theatre surfaces before the next session
- only the minimum number of healthcare personnel required should be involved
- protective clothing should be worn, i.e. single use liquid repellent operating gown, over a plastic apron, gloves, mask and goggles, or full-face visor
- single-use disposable surgical instruments and equipment should be used where possible, and subsequently destroyed by incineration or sent to the instrument store
- effective tracking of re-usable instruments should be in place, so that instruments can be related to use on a particular patient.

a) Handling of instruments that are not designated as single use

Where single-use instruments are not available, the handling of reusable instruments depends on:

- how likely the patient is to be carrying the infectious agent (the patient's risk status)
- whether the patient has, or is "at increased risk" of, CJD/vCJD
- how likely it is that infection could be transmitted by the procedure being carried out i.e. whether there is contact with tissues of high or medium infectivity.

Tables 2 and 3 separately set out the actions to be taken for instruments used on patients with, or "at increased risk" of, CJD/vCJD. The differences in instrument management are due to differences in tissue infectivities between CJD/vCJD.

Table 2 Handling of instruments – patients with or "at increased risk " of CJD (other than vCJD)			
Tissue infectivity	**Status of patient**		
	Definite or probable	**Possible**	**At increased risk**
High*			
Brain Spinal cord Cranial nerves, (entire optic nerve or intracranial components of other cranial nerves) Cranial ganglia Posterior eye (posterior hyaloids face, retina, retinal pigment epithelium, choroid, subretinal fluid and optic nerve Pituitary gland	Single use Or Destroy Or Quarantine for re-use exclusively on the same patient	Single use Or Quarantine for re-use exclusively on the same patient	Single use Or Destroy Or Quarantine for re-use exclusively on the same patient
Medium			
Spinal ganglia Olfactory epithelium	Single use Or Destroy Or Quarantine for re-use exclusively on the same patient	Single use Or Quarantine for re-use exclusively on the same patient pending diagnosis	Single use Or Destroy Or Quarantine for re-use exclusively on the same patient
Low	No special precautions	No special precautions	No special precautions

Table 3 Handling of instruments – patients with or "at increased risk " of vCJD			
Tissue infectivity	**Status of patient**		
	Definite or probable	**Possible**	**At increased risk**
High*			
Brain Spinal cord Cranial nerves, (the entire optic nerve or intracranial components of other cranial nerves) Cranial ganglia Posterior eye (posterior hyaloid face, retina, retinal pigment epithelium, choroid, subretinal fluid and optic nerve Pituitary gland	Single use Or Destroy Or Quarantine for re-use exclusively on the same patient	Single use Or Quarantine for re-use exclusively on the same patient pending diagnosis	Single use Or Destroy Or Quarantine for re-use exclusively on the same patient
Medium			
Spinal ganglia Olfactory epithelium Tonsil Appendix Spleen Thymus Adrenal gland Lymph nodes and gut associated lymphoid tissues	Single use Or Destroy Or Quarantine for re-use exclusively on the same patient	Single use Or Quarantine for re-use exclusively on the same patient	Single use Or Destroy Or Quarantine for re-use exclusively on the same patient
Low	No special precautions	No special precautions	No special precautions

*Although dura mater is designated low infectivity tissue, procedures conducted on intradural tissues (i.e. brain , spinal cord and intracranial sections of cranial nerves) or procedures in which human dura mater has been implanted in a patient prior to 1992, are high risk and instruments should be handled as such.

b) Quarantining instruments

Where instruments should be quarantined the following procedure should be used.

On completion of the surgical / endoscopy procedure, reusable instruments and endoscopy equipment should be processed for quarantine:

- surgeon should wear disposable gloves, plastic apron and eye protection (either goggles or a visor) to process the instruments for quarantine
- surgeon should wash re-usable instruments to remove gross soilage by completely immersing instrument/s under water in a sink where water is continuously running in and draining out. To avoid aerosols, instruments must not be held directly under a tap
- instruments should then be placed in a disposable instrument tray and allowed to air dry
- dried instruments should then be placed in the approved robust, leak proof container (previously obtained from ASDU). The disposable instrument tray should be discarded as clinical waste
- the lid of the container should be sealed with heavy duty tape, marked 'DANGER OF INFECTION: INSTRUMENTS IN QUARANTINE'
- The instrument container should be labelled (label available from ASDU):

  Name of Patient
  Date of Birth
  Hospital Number
  Procedure carried out
  Name of Person responsible
  Date container sealed
  Department or Ward
  ASDU – Date container received
  Signature

- container should be transferred to ASDU as soon as possible after use by a designated person from the theatre team and stored indefinitely until the outcome of any further investigation is known and further instructions are given by the Infection Prevention Control Team
- If the patient is confirmed as suffering from vCJD or CJD (other transmissible spongiform encephalopathy) or the diagnosis remains uncertain, the box and its contents should be disposed of as clinical waste by incineration

- only if the patient is confirmed as having an alternative diagnosis, the instruments should be unpacked, and re-processed in ASDU in the normal way and returned into routine circulation
- a record should be kept by the Theatre manager of the decisions made and the actions taken.

c) Incineration of instruments

The instruments should already be in a combustible sealed container. This should then be disposed of via the clinical waste stream, ensuring that this results in incineration.

8. Assessment of patients prior to emergency or elective surgery or endoscopy

This section draws on Annex J of the ACDP TSE Risk Management Subgroup guidance:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/270735/Annex_J_Assessment_to_be_carried_out_before_surgery_and_or_endoscopy_to_identify_patients_with__or_at_risk_of__CJD_or_vCJD.pdf

The CJD Incidents Panel has identified a number of individuals or groups who are at increased risk of CJC or vCJD. Further information on these groups can be found in paragraphs J14 to J18 of Annex J.

All patients about to undergo any elective or emergency surgical or endoscopic procedure should be asked the question:

“Have you ever been notified that you are at increased risk of CJD or vCJD for public health purposes?”

The actions to take following the patient’s response to this question are:

Patient's response	Action
No	Surgery or endoscopy should proceed using normal infection prevention and control procedures unless the procedure is likely to lead to contact with high risk tissue.
Yes	Please ask the patient to explain further the reason they were notified. Special infection prevention and control precautions should be taken for all surgery or endoscopy involving contact with medium or high infectivity tissues (see Appendix 1) and the infection prevention and control team should be consulted for advice. Section 8 provides advice on the precautions to be taken during the treatment of patients with or at increased risk of CJD or vCJD. Section 9 of this document and Annex F of the ACDP TSE Risk Management Group provides information on endoscopic procedures. The patient's response should be recorded in their medical notes for future reference.
Unable to respond	Surgery or endoscopy should proceed using the normal infection prevention and control procedures unless the procedure is likely to lead to contact with high risk tissue. If this is the case refer to the recommendations n Annex J of the ACDP TSE guidance from paragraph J3, esp J7-J10.

9. Endoscopy

This section is based on Annex F of the guidance from the Advisory Committee on Dangerous Pathogens Transmissible Spongiform Encephalopathy (ACDP TSE) Risk Management Subgroup.

https://www.gov.uk/government/publications/guidance-from-the-acdp-tse-risk-management-subgroup-formerly-tse-working-group

Certain endoscopy procedures may result in the endoscope becoming contaminated with material containing TSE agents.

Prior risk assessment of patients undergoing endoscopy is important.

Channel cleaning brushes and if biopsy's forceps or other accessories have been passed, the rubber valve on the endoscope biopsy/instrument channel port should be disposed of as clinical waste after each use. Single use disposable biopsy forceps should be used in all patients.

As defined in Annex F, endoscopes used for certain procedures in the CNS and nasal cavity in individuals with possible sporadic CJD, or in whom the diagnosis is unclear, should be removed from use or quarantined pending diagnosis or exclusion of CJD (see Table F1, Annex F in the ACDP TSE for clarity of this issue). The principles and procedures recommended for quarantining of surgical instruments in Annex E of the ACDP TSE Risk Management Group guidance should be followed, except the endoscope should be fully cleaned and decontaminated immediately after use, before being quarantined.

When decontaminating the endoscope cleaning equipment, the EWD should be put through an "empty" self-disinfection cycle as per recommended routine. Provided that the cleaning equipment is decontaminated as indicated, there is no known risk of transmission of TSE agents via this route.

Following use in patients at risk of vCJD endoscopic accessories (including normally reusable devices such as heater probes) and cleaning aids such as brushes should be disposed of by incineration.

For more detailed information on measures to be taken in endoscopy please refer to the guidance at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/270734/Annex_F_Endoscopy.pdf

10. Community healthcare of CJD/vCJD patients

People should not be dissuaded from routine contact with CJD/vCJD patients as both CJD and vCJD are not thought to present a risk through normal social or routine clinical contact.

No special measures over and above standard infection prevention and control precautions are generally required for caring for CJD/vCJD patients in the community, as it is unlikely that procedures will be adopted that will lead to contact with high or medium risk tissues.

a) Caring for symptomatic patients at home

Those caring for patients at home should be advised of the standard infection prevention and control practices that would apply to any patient. They should be provided with disposable gloves, paper towels, waste bags and sharps containers, as appropriate.

Late stage CJD/vCJD patients may experience tissue breakdown and the development of extensive pressure sores. These lesions should be dressed regularly, using standard infection prevention and control precautions, and contaminated dressings disposed of as normal clinical waste.

b) Spillages

It is assumed that all spillages in the community will be of low risk material, for example blood and urine. Standard infection prevention and control precautions should be followed to clear up spillages of material from patients with, or "at increased risk" of, CJD/vCJD in the community. Spillages should be cleared up as quickly as possible, keeping contamination to a minimum. Disposable gloves and an apron should be worn when removing such spillages. The surface should then be washed thoroughly with detergent and warm water.

For spillages of large volumes of liquid, absorbent material should be used to absorb the spillage. A number of proprietary absorbent granules are available for such use, including those containing sodium dichloroisocyanurate, but it should be noted that these do not deactivate TSE agents.

Any waste (including cleaning tools such as mop heads and PPE worn) should be disposed of as normal clinical waste.

c) Clinical waste

Clinical waste should be disposed of as set out in the clinical waste policy.

d) Bed linen

Patients' clothes and bed linen can be washed as normal, although in the interests of general hygiene it may be preferable to wash fouled linen separately. Commercial laundry services can be used as an alternative and, particularly where patients are incontinent, a laundry service can be of great help to carers.

11. Pregnancy

In the event that a patient with, or "at increased risk" of, CJD or vCJD becomes pregnant, no additional infection prevention and control precautions need to be taken during the pregnancy. If a home delivery is decided upon, it is the responsibility of the midwife to ensure that any contaminated material is removed and disposed of in line with the clinical waste policy.

12. Dentistry

The risks of transmission of infection from dental instruments are thought to be very low provided satisfactory standards of infection prevention and control and decontamination are maintained. There is no reason why any patient with, or "at increased risk" of, CJD or vCJD, should be refused routine dental treatment. Such people can be treated in the same way as any member of the general public.

Information for dentists about the management of patients with, or "at increased risk" of, CJD/vCJD can be found in *Decontamination Health Technical Memorandum 01-05: Decontamination in primary care dental practices (March 2013)* at:

www.gov.uk/government/uploads/system/uploads/attachment_data/file/170689/HTM_01-05_2013.pdf

This also includes advice for dentists on the re-use of endodontic instruments and vCJD.

Dental instruments used on patients with, or "at increased risk" of, CJD or vCJD can be handled in the same way as those used in any other low risk surgery, i.e. these instruments can be reprocessed according to best practice and returned to use. Dentists are reminded that any instruments labelled by manufacturers as 'single-use' should not be re-used under any circumstances.

Advice on the decontamination of dental instruments can be found in the Department of Health guidance HTM01-05 *Decontamination Health Technical Memorandum 01-05: Decontamination in primary*

care dental practices (March 2013). This guidance has been produced to reflect a reasonable and rational response to emerging evidence around the effectiveness of decontamination in primary care dental practices, and the possibility of prion transmission through protein contamination of dental instruments. It is available at:

www.gov.uk/government/uploads/system/uploads/attachment_data/file/170689/HTM_01-05_2013.pdf

13. After death

On the death of a patient diagnosed as CJD / vCJD, the removal of the deceased from the ward, community setting or hospice, to the mortuary, should be carried out using normal infection control measures. The deceased should be placed in a body bag, which should be labelled as High-Risk or Danger of Infection prior to transportation to the mortuary, in line with normal procedures for deceased patients where there is a known infection risk. An infection control notification sheet should be completed and given to the undertakers concerned with the deceased. (A specimen sheet, similar to that included in the Health Services Advisory Committee guidance on "Safe working and prevention of infection in the mortuary and post-mortem room" (second edition, 2002) (HMSO.ISBN 07176 2293 2) is included as Appendix 2).

Appendix 1: Distribution of transmissible spongiform encephalopathy infectivity in human tissues and body fluids

Key: **+ve** = tested positive **-ve** = tested negative
N T = not tested **P** = infectivity proven in experimental transmission studies

Tissue	*Presence of abnormal Prion Protein and level of Infectivity*			
	CJD other than vCJD		*vCJD*	
	PrP^{TSE} detected	Assumed Level of Infectivity	PrP^{TSE} detected	Assumed Level of Infectivity
Brain	+ ve	High **P**	+ ve	High **P**
Spinal cord	+ ve	High **P**	+ ve	High **P**
Cranial nerves, specifically the entire optic nerve and only the intracranial components of the other cranial nerves	+ ve	High	+ ve	High
Cranial ganglia	+ ve	High	+ ve	High **P**
Posterior eye, specifically the posterior hyaloid face, retina, retinal pigment epithelium, choroid, subretinal fluid, optic nerve	+ ve	High **P**	+ ve	High
Pituitary gland	+ve	High (?)	+ve	High (?)
Spinal ganglia [1]	+ve	Medium	+ve	Medium **P**
Olfactory epithelium	+ ve	Medium	NT	Medium
Dura mater [2]	-ve	Low	+ve [4]	Low
Tonsil	- ve	Low	+ ve	Medium **P**
Lymph nodes and other organised lymphoid tissues containing follicular structures	-ve	Low **P**	+ve	Medium **P**
Gut – associated lymphoid tissue	-ve	Low	+ve	Medium
Appendix	- ve	Low	+ ve	Medium
Spleen	+ve	Low **P**	+ ve	Medium **P**
Thymus	- ve	Low	+ ve	Medium
Anterior eye and cornea	- ve	Low	- ve	Low
Peripheral nerve	+ ve	Low	+ve	Low
Skeletal muscle	+ve	Low	+ve	Low
Dental pulp	- ve	Low	-ve	Low
Gingival tissue	NT	Low	-ve	Low
Blood and bone marrow	NT	Low	-ve	Low
CSF[3]	- ve	Low **P**	- ve	Low
Placenta	-ve	Low	- ve	Low
Urine	-ve	Low	-ve	Low
Other tissues	-ve	Low **P**	+ve [4]	Low

The information in this table is taken from Annex A1 of the ACDP TSE Risk Management Subgroup.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/209759/Annex_A1_-_Distribution_of_TSE_infectivity.pdf

[1]Spinal ganglia have a high assumed level of infectivity in the WHO Guidelines. However, unpublished results on the infectivity of spinal ganglia indicate that this tissue is of medium infectivity.

[2]Dura mater is designated low infectivity as virtually no detectable abnormal prion protein has been found in cases of CJD; however, as grafts of these tissues are associated with CJD transmission, probably as a result of contamination by brain and because of the lengthy period of implantation in the CNS, procedures conducted on intradural tissues (i.e. brain, spinal cord and intracranial sections of cranial nerves) or procedures in which human dura mater was implanted in a patient prior to 1992, remain high risk.

[3]Although PrP^{TSE} has not been detected in the CSF in either sporadic or variant CJD, experimental transmission of infectivity has been achieved from CSF in sporadic CJD in 4 of 27 primates by intracerebral inoculation indicating that levels of infectivity are likely to be much lower than in the central nervous system.

[4]PrPTSE has been detected in dura mater, skin, kidney, liver, pancreas, ovary and uterus in a case of vCJD in USA with a lengthy duration of illness. Earlier studies of these tissues in UK vCJD cases gave negative results.

Appendix 2 Specimen Infection Control Notification Sheet following death of a patient with CJD / vCJD

Name of deceased:

Date and time of death:

Source hospital and ward:

The deceased's remains are a potential source of infection:

YES **UNKNOWN** (see note 1 below)
(circle as appropriate)

If **YES** (see note 2 below), the remains present an infectious hazard of transmission by: (ring as appropriate):

Inoculation **Aerosol** **Ingestion**

Instructions for handling remains (If **YES** above, tick as appropriate):

Body bagging ☐

Embalming presents high risk ☐

Signed: (Note 3)

Print name

On behalf of: (hospital / mortuary / General Practitioner)

Note 1: Not all infected patients display typical symptoms, therefore some infections may not have been identified at the time of death.

Note 2: In accordance with health and safety law and the information provided in the Health Services Advisory Committee guidance *Safe working and the prevention of infection in the mortuary and post-mortem room* (Second edition 2002).

Note 3: In hospital cases, the doctor certifying death, in consultation with ward nursing staff, is asked to sign this Notification sheet.

Where a post-mortem examination has been undertaken, the pathologist is asked to sign this Notification Sheet.

In non-hospital situations, the doctor certifying death is asked to sign this Notification Sheet.

5.1 FOOD & BEVERAGES ON WARDS POLICY

Aim: Staff deal with food in a safe manner and in accordance with current food legislation

A food handler is any person who handles drinks or opened/unopened food, equipment, utensils or surfaces used for food preparation/serving.

Standards

Food Handlers

1. Food Handlers suffering from diarrhoea and / or vomiting and other symptoms of food borne infections (e.g. nausea, abdominal pain, fever), heavy colds, skin infections, including sore and discharging lesions must inform their Supervisor or Nurse in Charge and not participate in food handling duties until advice has been sought from Occupational Health.

2. Before handling or serving food, including beverages, all food handlers must wash their hands in the wash hand basin nearest to the food serving point

3. All food handlers should observe the personal hygiene rules and wear a **blue disposable apron** when handling or serving food, whether it is for main meals or beverages, e.g. morning, afternoon and evening refreshments. Aprons should be stored within the kitchen area and **must** be removed after kitchen duties are complete.

Serving of Food

1. Serving of food should commence as soon as possible and certainly within **15 minutes of arrival**. Any food deemed unacceptable must be returned to the issuing kitchen and the Catering Manager / Deputy informed

2. Food in insulated containers: the container lids must not be removed until food is to be served

3. Ice cream sent to wards in trolleys should be placed in ward kitchen freezer immediately on arrival. Where a kitchen freezer is not available the ice cream should remain in the insulated container and should be served at the end of that meal. All unused ice-cream must be disposed of.

4. On no account should any food from the patients' food trolley be stored at ward level, with the exception of date-stamped pre-packed products. If patients are out of the ward at meal times, please contact the catering staff to make alternative arrangements

5. All unused food must be returned to the main kitchen or central wash-up, or disposed of via a waste disposal unit. No unused food must be kept on the ward. **Staff must not consume food or drink intended for patients**

   Patients menu cards should be kept for 7 days to aid investigation should a food-borne outbreak occur

6. Patients and visitors must not be allowed into ward kitchens.

   Exceptions may apply where patients are in hostel type accommodation where self-catering is encouraged

Patients' Food

Relatives should be discouraged from bringing in 'high risk' foods [see below] and are restricted to providing commercially available products, which are date stamped and labelled with the patient's name. Any deviation from this for patient benefit must be documented in the patients notes. A record should be made of the food eaten, the date and time of consumption, and where it was purchased or made
.

Microwave Ovens

Any microwaves in care areas are for staff use only and must not be used in ward areas to reheat patients' meals. The exception to this is the Apetito microwave provided for regeneration of Apetito meals.

Windows

Kitchen windows must be closed at all times except where insect proof mesh is on windows.

High Risk Foods

Definition: Foods which, under favourable conditions, support the multiplication of pathogenic bacteria and are intended for consumption without further treatment that would destroy the pathogens. Such foods are usually ready to eat, high protein, moist foods which require refrigeration.

They include:

- cooked meats and cooked meat products, including gravy and stock
- unpasteurised milk, cream, custards
- cooked eggs
- egg and dairy products, unpasteurised soft cheeses
- cooked poultry
- shellfish and other ready to eat sea foods
- cooked rice
- pre-mixed raw vegetable salads, such as coleslaw.

5.2 TAKE-AWAY FOODS: GUIDELINES

Aim: To ensure that take away foods are dealt with in a safe manner to prevent food related illnesses

This document must be read in conjunction with 'Preparation and serving of food and beverages on wards - Guidelines' in NHS Borders Infection Control Policy Manual and Guidelines for Training Kitchens where applicable.

Standards

1. It is important that staff and patients are aware that patients may be susceptible to acquiring infection from take-away foods or foods brought in from out with healthcare premises

2. A record should be made in the patient's notes of the food eaten, the date and time of consumption, and where it was purchased. This is to allow access to a full food history, in the event of the patient(s) suffering from symptoms of food poisoning,

3. If several patients have eaten a meal from the same place this may be recorded in the ward diary as a single entry

4. The temperature of the food must be recorded before consumption. Hot food must be above 63°C. Take-away food not reaching this temperature **must** be discarded. (Seek advice from catering department with regard to food temperatures of that prepared and delivered from NHS Borders kitchens)

5. Food should not be reheated or saved

6. The food should be consumed immediately after purchase

7. If patients / relatives insist food is saved/consumed against advice, this should be documented in the patient's nursing notes

   It is the responsibility of the Ward / Departmental Manager to draw these guidelines to the attention of their staff.

5.3 WARD BARBEQUES: GUIDELINES

Aim: To undertake barbeques in a safe manner to prevent food related illnesses

Before arranging a barbeque, please contact catering department for advice to ensure compliance with food hygiene legislation.

In view of the risks associated with handling and cooking of raw meat products, in particular the risk of infection with *E.Coli* 0157, ward staff are required to follow the guidelines listed below when arranging a barbeque for patients / residents.

Standards

1. The ingredients must be supplied by a Hospital catering department, who will purchase them from an approved supplier (either Scottish Health Service Supplies or locally approved)

2. The catering department will cook all raw ingredients (meat only) to a core temperature of 75°C and then blast chill immediately after cooking

3. Where cooking of raw ingredients has been approved to support rehabilitation activities, this must be organised with the catering manager. It is a requirement for the member of staff supervising the cooking process to have a current elementary food hygiene certificate. Food temperatures must be recorded and sent to catering department [note: the core cooking temperature from raw must reach 75°C and reach 82°C for reheating

4. The catering department will wrap the cooked and chilled product in foil and send to the Ward/Department in an **insulated container at a time as close to the event time as possible.** (Container to remain closed until the start of the barbeque)

5. Ward staff should prepare the barbeque in the normal way, using the precooked and chilled ingredients supplied by the catering department

6. The Ward Staff must ensure a high standard of personal hygiene before handling the cooked food and then cook the food on the barbeque to provide the colouring/final cooking. A digital thermometer reading (which can be supplied by the catering department) must be taken to ensure that the core temperature of the item reaches 82°C, and must be recorded. Once this has

happened, the food is ready for service. If there is any food left over from the barbeque it must be discarded as soon as possible

A second reheat is not permissible.

5.4 WARD REFRIGERATORS: GUIDELINES FOR USE

Aim: Ensure that food is stored in a safe manner within a refrigerator, to prevent food related illnesses

Standards

1. The ward food refrigerator will be maintained by the Estates staff and cleaned and defrosted by the General Services staff or as per local policy

2. It is important that all faults are reported immediately to the Engineering Department by the Nurse in Charge

3. All reported faults must have an agreed deadline for rectification and progress monitored

4. The food refrigerator should operate between 1-4°C. The temperature must be recorded minimum twice daily and a record kept. Inform Estates department if the refrigerator temperature is operating out with 1-4°C [note: fridge temperature recordings should be made during periods of minimal activity when the fridge door has been closed for at least 2 hours; usually early morning and mid evening.

5. Freezer temperatures should operate between -12 and -18°C. The temperature should be recorded minimum once per day following the same principles as for refrigerators, and a record kept.

6. Recording sheets need to be returned to the catering department at the end of each month

7. All food and drink must be covered while in storage

8. All items must be used in rotation. Food or drink must never be consumed after use-by date or best before date

9. Large quantities of food must not be allowed to accumulate. Orders must only be placed for actual requirements. All surplus food must be disposed of

10. Food or drink purchased by staff or patients must be sealed and labelled with the date and name of the owner. Sufficient food for that day's use only should be brought in and stored

11. The Nurse in Charge has the responsibility of ensuring that the refrigerator is checked at the end of evening shift and that items incorrectly labelled, stored or out of date are disposed of

12. Drugs or specimens must not be placed in the food refrigerator

13. Raw poultry and shell eggs must not be stored in the refrigerator.

    Shell eggs may be stored in training kitchen refrigerators only, for the purpose of teaching patients how to hard boil eggs. Eggs must be boiled for a minimum of 7 minutes.

5.5 HOSPITAL FOOD PREPARATION AREAS: HYGIENE POLICY

Aim: Food is prepared in a safe manner to prevent food related illnesses

Every year thousands of people suffer from food-borne illness. A few, especially the very young, the elderly or the infirm will die. Many of our patients are particularly at risk. Healthcare staff must provide a high standard of food hygiene to ensure that food poisoning is prevented.

All food handlers in healthcare premises must be provided with sufficient knowledge and training to ensure that their work methods minimise the risks of a food poisoning outbreak.

The training currently available is the Royal Environmental Health Institute of Scotland (REHIS) Elementary Food Hygiene Certificate Course held at the Borders General Hospital and presented by catering department.

Standards

The application of Hazard Analysis Critical Control Point (HACCP) is a legal requirement and therefore all food handlers within NHS Borders must be able to identify all steps in their activities which are critical to ensuring food safety and to ensure that adequate safety procedures are identified, implemented, maintained and reviewed on the following principles:

- analysing the potential food hazards in their catering operation
- identifying the points in these operations where food hazards may occur
- deciding which of the points identified are critical to food safety: "the critical points"
- identifying and implementing effective control and monitoring procedures at those critical control points
- reviewing the analysis of food hazards, the critical control points and the control and monitoring procedures periodically.

The main purpose of such controls is to eradicate, as far as possible, the likelihood of food poisoning occurring as a result of improper handling of food.

One way to minimise this risk is to identify the ten most common risks of food poisoning and to ensure that they do not occur in our food premises.

For further information or advice on HACCP please contact the Catering Manager at BGH.

The ten main risk factors for food poisoning

1. Food prepared too far in advance and stored at room temperature, i.e. not under refrigeration.

2. Cooling food too slowly before refrigeration.

3. Not reheating food to high enough temperatures to destroy food poisoning bacteria.

4. The use of cooked food contaminated with food poisoning bacteria.

5. Undercooking.

6. Not thawing frozen poultry for sufficient time.

7. Cross-contamination from raw food to cooked food.

8. Storing hot food below 63°C.

9. Infected food handlers.

10. Use of leftovers.

Personal hygiene

A high standard of personal hygiene is very important to prevent the food handler contaminating food. To prevent contamination, the food handler must ensure that:

- smoking is prohibited in any room in which food is prepared or stored

- food handlers must wash their hands regularly throughout the working day, and especially:
  - after visiting the toilet
  - on entering and re-entering the food room
  - between handling raw and cooked food
  - after eating, smoking, coughing, sneezing or blowing their nose
  - after handling waste food or refuse
  - after handling cleaning chemicals

- fingernails should be kept short and clean. Nail varnish may contaminate food and therefore should not be used. False nails must not be worn

- food handlers should not eat sweets, chew gum, taste food with their fingers or unwashed spoons or blow on china or glass to polish it

- cuts, spots and sores should be completely covered by a waterproof dressing (colour blue) available from your place of work

- food handlers should not wear earrings, watches, jewelled rings or brooches

- a clean blue disposable apron should be worn when preparing, cooking or serving food

- clean protective clothing must be worn at the commencement of each working day and replaced more frequently should heavy soiling occur. Under no circumstances should outdoor clothing and personal effects be brought into food rooms.

Cleaning

The maintenance of high standards of cleanliness in all areas is given a high priority by NHS Borders, particularly in areas in which food is handled.

Cleaning schedules must clearly outline the frequency which cleaning is to be carried out, the materials to be used including chemicals, the method to be used and the standards to be achieved. It is, therefore essential that personnel who are asked to carry out such tasks are made aware of the content of the cleaning schedule for their area.

The level of cleanliness will be monitored daily by the Nurse in Charge or General Services Supervisor responsible for a particular area.

It will be the responsibility of the Charge Nurse or General Services Supervisor to check that Kitchen Audits are being completed monthly, and to check periodically that the standards of cleanliness highlighted in the cleaning schedules are being met.

Pest control

Food Handlers discovering an infestation should get expert advice immediately, by contacting Estates Department, who will call in specialists if necessary. Common pests include insects, flies, wasps, cockroaches etc, birds, mainly feral pigeons and sparrows, and rodents.

Reasons for controlling pests include:

- the prevention of the spread of disease
- the prevention of wastage of food
- the prevention of damage (fires and flooding caused by gnawing electric cables or pipes)
- to comply with the law

Good housekeeping

To reduce the risk of infestation, ensure that:

- premises and refuse areas are kept in a clean and tidy condition. Lids are always kept on waste bins, which should be washed after emptying, together with the surrounding area. Waste must not be allowed to accumulate

- food on display or awaiting preparation is always kept covered

- spills are cleared away promptly

- food is stored off the floor and clear of walls to facilitate regular inspection. Stock should be checked regularly and damaged stock removed

- food is stored in rodent-proof containers and lids are always replaced

- all deliveries of raw materials, packaging and laundry are checked to ensure their freedom from infestation

- drains are kept clean and in good condition, a water trap is always maintained and gullies have tight-fitting metal grills

- vegetation covering the immediate outside access to the food premises should be removed

- sightings of pests or pest damage are reported to management immediately.

Temperature control

Food must be delivered, stored, cooked and served at the correct temperatures to ensure the minimum risk of food poisoning. At various "critical points" the temperature of the food must be monitored and recorded, to ensure the maintenance of standards.

Digital Probe Thermometers must be used where a built in device is not supplied.

Delivery

When testing incoming high risk food the points to bear in mind are that the temperature immediately below the surface of the food (not wrappings) should be taken as well as core temperature. The higher of the two temperatures should be recorded on the monitoring sheet.

Refrigerator temperatures (1°C - 4°C,)

Routine monitoring of fridge units will be taken minimum twice daily by using the fridge thermometer provide or built in display.

Freezer temperatures (-18°C)

Where freezers have their own built-in temperature recording devices these will be recorded minimum twice daily. Probe thermometers should be used once a week to verify these results. When the probe is used its use should be highlighted in the remarks column of the temperature monitoring sheet.

FOR DAY UNITS:

Contact Catering Manager, Borders General Hospital for advice concerning any aspect of the Food Hygiene Policy

4.10 HANDLING & TRANSPORTATION OF CADAVERS CARRYING A RISK OF INFECTION: PROCEDURES

Aim: Minimise infection risk to staff, patients and visitors by using the correct handling procedures of cadavers

Standards

Last offices

- prior to carrying out last offices, the nursing staff will observe standard precautions, including the donning of personal protective clothing i.e. disposable plastic apron and gloves, facial protection if required

- the nursing staff will follow the normal procedure for last offices; remembering to close and tape the eyes and bandage the jaw and wrap the body in a shroud and then a sheet. Never use safety pins to fasten the sheet in place, use adhesive tape

- nursing staff will contact the General Services Supervisor at the Borders General Hospital, and the nursing staff will request the delivery of the mortuary trolley and a zipped cadaver [body] bag if required

  Where there is a lot of bleeding, or leakage of other body fluids from a body, the body should be placed in a cadaver bag even when not known as High Risk. Where there is no leakage it is not necessary to use a body bag where the patient has, for example; MRSA, Clostridium difficile (C.diff), influenza or norovirus

- if a body bag is required, on arrival at the bedside, General Services staff will put on a plastic disposable apron and disposable gloves, before lifting the body from the bed into the opened cadaver bag. The cadaver bag will then be zipped up.

- protective clothing is removed in the room and disposed of as clinical waste

- all staff should thoroughly wash and dry their hands before leaving the room and use alcohol hand rub after leaving the room.

- The nursing staff will provide detail on the intimation of death form, including infection risk. The body will then be transported to the mortuary and placed in the designated high risk area if appropriate.

  When a body is placed into the body bag, the zip closure MUST start at the feet and finish at the head. After transferring the body to the Mortuary, before closing the fridge door, open the zip part way (approximately ½ way or further if possible) on the body bag. Failure to do this causes the body to decompose more rapidly.

  The Infection Control Team will inform you of any exceptions to this rule.

Transfer of cadaver to hospital mortuary

- the risk MUST be indicated on the intimation of death form and High-Risk labels put on the orange label and complete the Notification Sheet

- on completion of the above procedure the General Services staff will transfer the body to the hospital mortuary

- on arrival at the hospital mortuary the body should be put into the High Risk Chamber.

Viewing

- the only cadavers which may be viewed are those listed in the table below. Relatives will be advised of any viewing restrictions by the nursing staff. Ideally viewing should be done on the ward before transfer to the mortuary

- where relatives insist on seeing the cadaver, arrangements should be made by the nursing staff with the mortuary staff. The mortuary staff will arrange the body so that the cadaver bag is not seen

- mortuary staff will inform funeral directors of the risk of infection.

High risk cadavers requiring autopsy

The mortuary staff will arrange the transfer of these cadavers to the High Risk Body Store, Royal Infirmary of Edinburgh. For cadavers that require a Free from Infection Certificate.
Infection Hazards Of Human Cadavers.

Infection	Bagging	Viewing
Acute encephalitis	No	Yes
Acute poliomyelitis	No	Yes
Anthrax	Advised	No
Chicken pox/shingles	No	Yes
Cholera	No	Yes
Clostridium difficile infection [CDI]	No	yes
Diptheria	Advised	Yes
Dysentry	Advised	Yes
E coli 0157	No	Yes
Food poisoning	No/Advised	Yes
Hepatitis A	No	Yes
Hepatitis B, C	Yes	Yes
HIV/Aids	Advised	Yes
Legionellosis	No	Yes
Leprosy	No	Yes
Leptospirosis (Weil's disease)	No	Yes
Lyme Disease	No	Yes
Malaria	No	Yes
Measles	No	Yes
Meningococcal (meningitis/ septicaemia)	Advised	Yes
Meningitis (non Meningococcal)	No	Yes
MRSA	No	Yes
Paratyphoid fever	Advised	Yes
Plague	Yes	No
Q fever	No	Yes
Rabies	Yes	No
Scarlet fever	Advised	Yes
Smallpox	Yes	No
Tetanus	No	Yes
Typhoid fever	Advised	Yes
Typhus	Advised	No
Transmissible spongiform encephalopathies e.g. vCJD	Yes	Yes
Tuberculosis	Advised	Yes
Viral haemorrhagic fever	Yes	No
Yellow fever	Yes	No

Definitions: Bagging: placing body into a zipped cadaver bag.
NB: Where there is leakage of body fluids, the body should be placed in a cadaver bag even when not known as High Risk.
Viewing: allowing the bereaved to see, touch, and spending time with the body before disposal.
Advised: Advisable, but may be required by the local authority.

NHS Borders
Area Mortuary
Borders General Hospital
Melrose
Roxburghshire
TD6 9BS
www.nhs.borders.org.uk

Telephone: 01896 826013
Fax 01896 826237

Free from Infection Certificate

To whom it may concern

This is to certify that this patient was under my care:

Name: _____

Address: _____

_____

_____

Date of birth: _____

Who died on: _____

At: _____

Cause of death: _____

I can confirm that to the best of my knowledge the body is free from infectious and contagious disease and may be transported safely.

Name: Signed:

Date: Designation: