CORE INSTRUCTIONS FOR INFECTION CONTROL

THE INFECTION CONTROL TEAM MAINTAINS AN EFFECTIVE PROGRAMME FOR THE PREVENTION OF HOSPITAL-ACQUIRED INFECTION AND THE CONTAINMENT OF INFECTIONS BROUGHT INTO THE HOSPITALS BY PATIENTS, STAFF OR VISITORS

YOU HAVE A ROLE IN PREVENTING THE SPREAD OF INFECTIONS
YOU MUST KNOW THESE POLICIES AND FOLLOW THEM COMPETENTLY

LEGEND

- Wash your hands
- notice — Notice available on website
- form — Form available on website www.infectioncontrolservices.co.uk/forms.htm

- Core Infection Control Policy
- Specific Communicable Diease
- Cleaning / Disinfection Policy
- Special Policy

Contact Details

University College London Hospitals NHS
NHS Foundation Trust

Main Hospital Switchboard: 0845 155 5000

Sharps Injury Reporting: 0845 155 5000 (0800-1630 ext 5474) (Out of hours ext 70034)
Infection Control Team: 0845 155 5000 (bleep 5819)
Microbiology Doctors: 020 7380 9515

METHICILLIN-RESISTANT *Staphylococcus aureus* (MRSA)

- Use diligent hand hygiene (See Hand Hygiene Policy) to prevent the spread of MRSA
- Screen for MRSA before major surgery and on admission to ICU
- Use Staphylococcal Decolonisation Protocol for staff and patients without wounds
- Apply Staphylococcal Decolonisation Protocol for 3-5 days pre-operatively


MRSA colonies shown with E-test

DANGEROUS PATHOGENS (SARS, INFLUENZA, AVIAN FLU, SMALLPOX, ANTHRAX)

- Patients with certain highly infectious or fatal diseases will be transferred to an Infectious Diseases Unit (IDU)
- If a patient with a highly infectious disease is suspected, call the Infection Control Team straight away!
- Personal Protective Equipment

ACTION

- Isolate the patient
- Reduce the contacts to a minimum
- Start contact list (available on website)
- Consider Personal Protective Equipment
- Call the Infection Control Team/Infectious Diseases Doctors
- Read the policy in full before sending any laboratory tests

VIRAL HAEMORRHAGIC FEVERS (VHF)

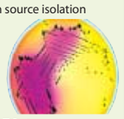
- A Rural African Risk Assessment is performed on all new patients with fever from areas endemic for VHF (mainly sub-Saharan Africa)
- Then a VHF risk assessment must be done (risk assessment form available on website)

BLOOD BORNE VIRUSES

- Patients with blood-borne viruses are generally not infectious to others, but health care staff are at risk because of sharps injuries
- All staff must be immunised against hepatitis B virus and know their immune status. Staff who are infectious carriers of hepatitis B or C and HIV are not allowed to perform exposure-prone procedures (EPP)
- Staff members must alert OH if they think they might have HIV or HCV and intend to perform EPPs
- Consultants have a responsibility to inform staff when they know a patient has a BBV

DIARRHOEA

- The first diarrhoeal stool must be sent to the lab for culture and CDT
- All patients with diarrhoea must be nursed in source isolation
- Send samples to the laboratory
- Inform Infection Control Team
- Consider whether it is part of an outbreak
- Food poisoning and outbreaks (see 'Outbreak Management')


Samonella enterica

ANTIBIOTIC-ASSOCIATED DIARRHOEA

- Any antibiotic can cause diarrhoea
- It is associated with *Clostridium difficile* which is common in the hospital environment
- Pseudomembranous colitis is a rare but severe form of the disease

SCABIES & LICE (ECTOPARASITES)

- Ectoparasites live on the skin or in the hair or in the environment and bite transiently
- Because they are visible (or their effects are visible, as in scabies), they cause disproportionate anxiety and discomfort
- Scabies in immunocompromised patients is infectious to carers, but simple hygienic precautions will protect health care workers

RESPIRATORY VIRUS INFECTIONS

- Common cold viruses can cause life-threatening infection in immunocompromised patients
- Staff with colds must not care for immunosuppressed patients
- Simple steps (eg. hand hygiene) must be taken to reduce the risk of transmission
- All staff are offered immunisation against influenza

MENINGITIS

- Patients with bacterial meningitis need urgent attention and immediate antibiotics
- Source isolation precautions should be taken initially
- The risk to health care workers of acquiring meningitis is very low

TRANSMISSIBLE SPONGIFORM ENCEPHALOPATHIES (CJD)

Patients with degenerative central nervous system disease without a clear diagnosis or known CJD must not have any invasive procedure, especially endoscopy, without telling the Infection Control Team

SOURCE ISOLATION

- Do a risk assessment and prepare the room & patient
- Plan equipment for the room
- Print out a notice to stick on the door (available on website)

SOURCE ISOLATION PROCEDURE:

- Use plastic aprons (yellow) and gloves
- Clean hands or gloves before you touch the patient
- Discard protective clothing into the yellow sack in the room
- Clean hands when you leave


Source isolation notice (see website to download)

HIERARCHY OF RISK

If isolation facilities are limited, decide who should go into source isolation.
*Consider transfer to infectious diseases unit bed

1. Fever from sub-Saharan Africa*
2. TB, chicken pox, measles, mumps, rubella*
3. Diarrhoea
4. Alert organisms (eg MRSA, *Streptococcus pyogenes* in wounds and respiratory tract)*
5. Undiagnosed rash illness, cellulitis, PUO*

CLEANING AREAS USED FOR SOURCE ISOLATION

- Make sure the room or area is cleaned properly daily and after discharge of a patient (see 'Hierarchy of Risk')

NOTIFIABLE DISEASES

You must notify the following infectious diseases to your local Health Protection Unit:

Anthrax	Plague
Cholera	Poliomyelitis (acute)
Diphtheria	Relapsing fever
Dysentery	Rubella
Encephalitis (acute)	Scarlet fever
Food poisoning	Smallpox
Leptospirosis	Tetanus
Leprosy	Tuberculosis
Malaria	Typhoid
Measles	Typhus fever
Meningitis (acute)	Viral Haemorrhagic fever
Meningococcal septicaemia	Viral Hepatitis ('Infectious Jaundice')
Mumps	Rabies
Ophthalmia neonatorium	Whooping cough
Paratyphoid fever	Yellow Fever

notice — Notification form available on website

TUBERCULOSIS

- Only 'open' (cavitating) pulmonary tuberculosis is infectious to others
- Care for patients with open tuberculosis in a negative pressure side room
- Special masks can be worn in the room of a patient with open tuberculosis
- Respiratory care, surgery and autopsy in patients with infectious tuberculosis are risky to the staff performing these procedures (special masks must be worn)
- Children and people with HIV are very prone to catching tuberculosis


Open cavitating pulmonary tuberculosis

CHICKEN POX & SHINGLES (VARICELLA)

- Staff must know their immune status (screen at Occcupational Health where available)
- Active vaccination is available from the Occupational Health Department

IF THERE IS A CASE IN A CLINICAL AREA

- Isolate the patient
- Draw up lists of staff and patient contacts
- Contact the Infection Control Team
- Susceptible staff in contact with chicken pox may have to be excluded from working in sensitive areas between day 8 after first contact and day 21 after last contact


Chicken pox with impetigo

RUBELLA (German measles)

- Know that you are immune by infection or immunisation (see 'Occupational Health')
- Rubella is dangerous to the fetus if caught during pregnancy
- Patients with undiagnosed rashes must be isolated
- Staff with a viral rash illness must not come to work


German measles

PRINCIPLES OF INFECTION CONTROL

- Know how infections spread
- Use Standard Precautions to prevent contact with bodily fluids
- Does the patient need Source Isolation or Protective Isolation?
- Explain the need for isolation to the patient
- Are visitors a risk or at risk? Counsel the visitors
- Use Information Leaflets (available on website)

notice


Impetigo

HAND HYGIENE

Use alcohol gel on hands immediately before you touch a patient

- Learn how to clean your hands effectively
- Wash your hands with soap and water:
  - When starting a shift
  - When visibly soiled
  - Before drug rounds
  - When serving food


Hands-free handwashing basin

UNIFORMS

Dress

- Keep sleeves rolled above the forearm or elbow
- Do not wear a wrist watch or any jewellery

Gloves

- Use non-sterile gloves to protect yourself
- Use sterile gloves to protect the patient (aseptic procedures)
- Scrub properly before performing aseptic procedures

Aprons

- Use aprons to protect your clothes


Correct use of apron and gloves

SHARPS INJURIES

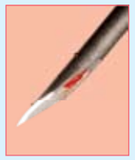
If a sharps injury occurs:

- Encourage bleeding
- WASH the wound under running water or rinse mucous membranes with copious amounts of water
- REPORT locally to the most senior person present

This person takes responsibility for managing the incident, as follows:

With regard to DONOR:

- Check if donor is known to be BBV positive or at risk of BBV
- Discuss matter with the DONOR (this should not be done by the RECIPIENT)
- Arrange collection of a tube of EDTA (purple-top) blood for infection screening
- Ask if DONOR wants to know the results (blood not taken for DONORs benefit)
- Write action taken in DONORs notes


One million infectious doses of hepatitis B virus

With regard to RECIPIENT:

- Report incident: TELEPHONE the number in the contact box (see above)
- Provide EDTA (purple-top) blood to save (within 48 hrs)
- Complete a Trust Accident / Incident Form (form available at www.infectioncontrolservices.co.uk/sharps_intro.htm)
- If the DONOR is known to be infected with HIV, the RECIPIENT must get an antivirals starterpack from A&E and read the package insert NOW! (example starterpack insert available at www.infectioncontrolservices.co.uk/sharps_intro.htm)


Do not store sharps bins on the floor

With regard to FOLLOW-UP:

- RECIPIENT must liaise with Occupational Health to get DONORs test results and for further action
- DONOR: if the results are requested by the DONOR, then the doctor who takes the blood must take responsibility for telling the DONOR the results


Ensure you use the correct blood collection bottle

Issue Date: July 2007
For full guidelines and policies: www.infectioncontrolservices.co.uk
E-mail us: info@infectioncontrolservices.co.uk
To order additional copies: orders@infectioncontrolservices.co.uk

ASEPTIC NON-TOUCH TECHNIQUE (ANTT)

- CLEAN HANDS. Clean the aseptic field (eg plastic tray or trolley)
- While tray dries, gather equipment, drugs etc
- CLEAN HANDS and put on non-sterile gloves
- Prepare drugs and equipment
- Protect key parts by a non-touch technique
- Prepare the patient and gain access to procedure site
- Clean key parts/procedure site and allow to dry
- Perform the procedure
- Clear up, remove gloves and CLEAN HANDS

PROTECTIVE ISOLATION

- Perform a risk assessment as to the level of protection required
- Isolate the patient if necessary
- Prepare the patient and the room
- Reduce risks by diligent hand hygiene
- Post a notice on the door (available on website)
- No staff member suffering from any infectious disease (including the common cold and active cold sores) can attend an immunosuppressed patient


Protective isolation notice (see website to download)

OUTBREAK MANAGEMENT

If you suspect an outbreak (two or more cases of the same syndrome/ organism) ON FIRST SUSPICION, ward staff should:

- Record all the cases, noting the time of onset of symptoms in each suspected case, and dates of admission to the hospital and ward
- Inform the Infection Control Team
- Isolate the first cases where possible
- Collect appropriate microbiology / virology specimens after consultation
- Make a list of those affected with admission dates and date of onset of the infection (contact tracing sheet available on website)

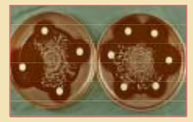
LAST OFFICES ON INFECTED PATIENTS

- Place patients who have died in waterproof body bags
- Use the same precautions handling the body which were used when the patient was alive
- Fill in a risk/hazard form to accompany all patients to the mortuary (available on website)

SPECIMENS FOR CLINICAL LABORATORIES

- Ensure all specimens are labelled correctly
- The freshness of the specimen determines its usefulness, so get all specimens to the laboratory as soon as possible
- All specimens are potentially dangerous so should be bagged and must be transferred to laboratories in proper rigid containers
- Contaminated and unlabelled specimens will be discarded
- Label specimens 'HIGH RISK' when appropriate
- Serum should be saved in Virology for those having major cardiac, cranial, or abdominal surgery


Biochemical tests for bacterial pathogens


Antibiotic sensitivity disks on agar plates

PROTECTION OF STAFF AND HEALTH SURVEILLANCE

- Staff must report any illness which may be a risk to patients, to their manager
- Sick staff (especially those with a rash) must not go to clinical areas
- Staff must have pre-employment screening by Occupational Health
- Know what immunisations are offered by Occupational Health and whether you are up to date

MANAGEMENT OF INTRAVENOUS DEVICES

[peripheral cannulae, central venous catheters, arterial and intrathecal devices, etc.]

- Only trained staff can put in lines and maintain them
- Catheters must be adequately fixed to prevent movement at the insertion site
- Assessment for line site inflammation must be made every shift and documented
- Suspected infection of a line indicates that it must be removed immediately


Infected wound from IV line

DISPOSAL OF SOILED LINEN, WASTE AND SHARPS

- All clinical waste must go in a yellow waste sack
- The rest must go in black bags
- Linen goes into clear/white bags or red bags if soiled
- Waste bags must not be overfilled
- Bags must be tied using labelled ties for traceability
- Sharp materials must be put in a Sharps Bin which must not be more than three-quarters full

SPILLAGE POLICY

- All spillages must be cleaned up promptly
- Specific action depends on the nature of the spillage
- Clearly define Nurse/Domestic responsibilities
- Wear proper protective clothing
- There is a special policy for mercury and radiation spillages (see website for full policies)

DECONTAMINATION OF EQUIPMENT BEFORE SERVICE OR REPAIR ('PERMIT TO WORK' PROCEDURE)

Contaminated medical equipment must be made safe before service or repair

- You must inform inform engineers and others that equipment is safe or unsafe by using the 'Permit to Work' form, which is available and must be filled in by a nurse before work starts or before equipment is taken away (available on website)

DISINFECTION POLICY

- Cleaning is the key to disinfection
- Clean using detergents in the first instance
- Chemical disinfection is rarely needed in hospitals
- Single use devices must never be reprocessed or re-used (2)


State-of-the-art cleaning trolley

WOUND MANAGEMENT / OTHER INVASIVE PROCEDURES

Wound infection may be prevented by:

- Preventing a patient acquiring virulent flora (eg MRSA)
- Aseptic techniques in surgery
- Judicious use of antibiotic prophylaxis
- Proper post-operative wound management


Infected arm wound

OTHER GUIDELINES AVAILABLE ON WEBSITE

There is a comprehensive list of notes on infectivity, transmission and management of infectious diseases and their risk of infection (see A–Z lists on website)

A prize to anyone who can spot an important disease not on the list and draft a policy!

Control of infection (preface)	Infection surveillance
Philosophy of infection control	Fibre-optic endoscopes
Roles and responsibilities	Hydrotherapy pool hygiene
Ignaz Semmelweis (1818-1865)	Dental procedures in high risk patients
Table of infections	Neonatal unit infection control
Legionellosis	Paediatric unit infection control
Mercury spillages	Wound management
Radiation spills	Hydrotherapy pool infection control
ICU disinfection	Wound management
Operating theatres	

INFORMATION SHEETS & FORMS AVAILABLE (see www.infectioncontrolservices.co.uk/forms.htm)

- Information sheets for patients & visitors
- Personal Protective Equipment (PPE) information sheet
- Contact tracing sheets
- Post mortem patient identification form
- Isolation notices for doors
- Notification of infectious diseases form
- Outbreak investigation form
- MRSA decolonisation protocol
- Rural African risk assessment form
- Viral haemorrhagic fever (VHF) risk assessment form
- Checklist for meningococcal sepsis
- Sharps injury reporting form
- Permit to work form