INFECTION PREVENTION AND CONTROL POLICY

POLICY NO: IC01
RATIFYING COMMITTEE: CLINICAL GOVERNANCE COMMITTEE
DATE RATIFIED: MARCH 2009
NEXT REVIEW DATE: MARCH 2012

POLICY STATEMENT:

This policy details the action required by all individuals directly employed by the Trust, contract staff, students, volunteers, locums and bank/agency staff, patients, carers and general public, which minimises the risk of infection, to patients, staff and visitors.

ACCOUNTABLE DIRECTOR: Executive Director of Nursing and Social Care/Director of Infection Prevention and Control
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KEY POLICY ISSUES

- The Transmission of Infection
- Decontamination of Hands – Hand Hygiene Policy
- Decontamination of the Environment, Cleaning, Body Fluid Spillages, Laundry and Clinical Waste
- Standard Principles for the use of Personal Protective Equipment
- Infectious Diseases, A-Z including Clostridium difficile Meningitis, MRSA and TB Policies
- Surveillance Policy
- Isolation Policy
- Major Outbreak Policy/Management of Outbreaks
- Blood Borne Virus Policy (HIV, Hepatitis B and Hepatitis C)
- Safe Use and Disposal of Sharps
- Aseptic Technique, Invasive Devices
Index

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Introduction</strong></td>
<td>10</td>
</tr>
<tr>
<td>1.1</td>
<td>Rationale</td>
<td>12</td>
</tr>
<tr>
<td>1.2</td>
<td>Scope of Policy</td>
<td>12</td>
</tr>
<tr>
<td>1.3</td>
<td>Principles</td>
<td>12</td>
</tr>
<tr>
<td>1.4</td>
<td>Infection Prevention and Control Risk Assessments</td>
<td>13</td>
</tr>
<tr>
<td>1.5</td>
<td>Reporting Infection Prevention Control Related Incidents</td>
<td>13</td>
</tr>
<tr>
<td>1.6</td>
<td>Training in Relation to Infection Prevention and Control</td>
<td>13</td>
</tr>
<tr>
<td>1.7</td>
<td>Information for patients, and public in relation to</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Infection Prevention and Control</td>
<td></td>
</tr>
<tr>
<td>1.8</td>
<td>Infection Control Assurance Framework</td>
<td>15</td>
</tr>
<tr>
<td>2.</td>
<td><strong>Policy</strong></td>
<td>16</td>
</tr>
<tr>
<td>2.1</td>
<td>Duties</td>
<td>16</td>
</tr>
<tr>
<td>2.2</td>
<td>Duty of Infection Control Committee</td>
<td>21</td>
</tr>
<tr>
<td>2.3</td>
<td>Legislation and Guidance</td>
<td>21</td>
</tr>
<tr>
<td>2.4</td>
<td>Professional Guidance</td>
<td>25</td>
</tr>
<tr>
<td>3.</td>
<td><strong>Infection Control Guidelines and Policies</strong></td>
<td>25</td>
</tr>
<tr>
<td>3.1</td>
<td>Common Risk Factors Predisposing to Infection</td>
<td>27</td>
</tr>
<tr>
<td>3.2</td>
<td>Decontamination of hands - Hand Hygiene Policy</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Introduction</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Rationale</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Scope of Policy</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Principles</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Policy</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Duties</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Legislation and Guidance</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Standard Principles for Hand Hygiene</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Effective Hand Washing Technique Involves Three Steps</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Preparation, Washing and Rinsing, and Drying</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Hand Cream and Skin Care</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Process for Monitoring Compliance and Effectiveness</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Development and Consultation</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Bibliography</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Glossary of Terms</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Effective Hand Washing- Ayliffe Technique</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>When to Wash Hands</td>
<td>33</td>
</tr>
<tr>
<td>3.3</td>
<td>Decontamination of the Environment</td>
<td>34</td>
</tr>
</tbody>
</table>


Infection Prevention and Control Policy

3.4  **Decontamination of Linen (Laundry Policy)**

3.5  **Clinical Waste**
3.6 Personal Protective Equipment

3.7 Collection and Transportation of Specimens

3.8 Invasive Devices

3.9 Aseptic Technique

3.10 Transfer or Discharge of Patients with Infections

3.11 Death of a Patient

3.12 Immunisation of Patients and Staff

3.13 Staff Uniform, Clothing and Dress Code

3.14 Infectious Diseases A-Z

Acinetobacter
Acquired Immune Deficiency Syndrome (AIDS)
Campylobacter Enteritis
Candidiasis
Cellulitis
Chickenpox (Varicella)
Chlamydia trachomatis Genital

Clostridium difficile Policy

Introduction
Rationale
Scope of Policy
Principles
Policy
Duties
Legislation and Guidance
Infection Control guidelines
Symptoms
Transmission
Treatment
Precautions
Discharge of patient
Communication
Cleaning, Daily and Terminal Decontamination
Process for Monitoring Compliance and Effectiveness
Development and Consultation
References
Bibliography
Glossary
Creutzfeldt Jakob Disease (CJD)  
New Variant (VCJD)/PNONS  
Cryptosporidium  
Diarrhoea  
Diphtheria  
Escherichia coli (E coli 0157)  
German Measles  
Giardiasis  
Glandular Fever  
Hepatitis A  
Hepatitis B  
Hepatitis C  
Herpes Simplex  
Herpes Zoster (Shingles)  
HIV  
Impetigo  
Influenza  
Legionnaires Disease  
Lice – Head  
Lice – Body  
Lice – Pubic  
**Meningitis Policy**  
Introduction  
Rationale  
Scope of Policy  
Principles  
Policy  
Legislation and Guidance  
Duties  
Epidemiology  
Symptoms  
Transmission, Incubation, Infectivity, Precautions  
Reducing Mortality from Meningococcal Disease  
Notification  
Chemoprophylaxis  
Vaccination  
Process for Monitoring Compliance and Effectiveness  
Development and Consultation  
References  
Bibliography  
Glossary of Terms  
**Methicillin Resistant Staphylococcus Aureus (MRSA) Policy**  
Introduction  
Rationale  
Scope of Policy  
Principles
3.15 **Surveillance Policy**

- Introduction
- Rationale
- Scope of Policy
- Principles
- Policy
- Duties
- Alert Condition Surveillance
- Transfer into Trust of Patients with Known Infective Organisms
- Notifiable Diseases
- Process for Monitoring Compliance and Effectiveness
- Development and Consultation
- References
- Bibliography
- Glossary of Terms

3.16 **Isolation Policy**

- Introduction
- Rationale
- Scope of Policy
- Principles
- Policy
- Duties
- Legislation and Guidance
- Isolation, and Isolation Facilities Required
- Contact Precautions/ Isolation
- Respiratory Isolation
- Strict Isolation
- Single Room Isolation
- Cohorting in Bays and Wings
- Communication
- Infection Control Standard Precautions
- Process for Monitoring Compliance and Effectiveness
- Development and Consultation
- References
- Bibliography
- Glossary of Terms
- Isolation Notice

3.17 **Major Outbreak Policy**

- Introduction
Scope of Policy 125
Principles 125
Duties 125
Legislation 126
Identification of Outbreaks 127
Types of Outbreak 127
Procedure to be followed on specific outbreaks 128
a. Diarrhoea and Vomiting 128
b. Respiratory Infection 130
Declaration of a Medical Emergency 131
Role of Outbreak Team 131
Ward Closure Leaflet 134
Process for Monitoring Compliance and Effectiveness 135
Development and Consultation 135
References 135
Bibliography 135
Glossary of Terms 135

3.18 Pandemic Influenza Guidance 136
3.19 Blood Borne Virus Policy 136
Introduction 136
Rationale 136
Scope of Policy 137
Legislation and Guidance 137
Principles 137
Policy 138
Duties 138
Key Points to minimise infection 139
Occupational Risk 139
HIV 140
HBV 141
HCV 142
HCV Genotypes 143
Hepatitis C Tests and their Meaning 144
Liver Investigations 144
Aims of Antiviral Treatment 144
Safe Handling and Disposal of Sharps 145
Venepuncture 145
Personal Protective Equipment 146
Clinical Waste 146
Contaminated Linen 146
Decontamination of Spillages and Equipment 147
Large Blood Spillages, Dried Blood and Faecal Smearing (Dirty Protests) 147
Specimens and Transportation 147
Accidental Exposure 147
First Aid Following Potential Exposure to Blood or Body Fluids 148
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate First Aid</td>
<td>148</td>
</tr>
<tr>
<td>Patient Care for Known Carriers of HIV/HBV/HCV</td>
<td>148</td>
</tr>
<tr>
<td>Death of a Patient with HIV/HBV/HCV</td>
<td>149</td>
</tr>
<tr>
<td>HIV/HCV Testing</td>
<td>149</td>
</tr>
<tr>
<td>BBV Donor Testing Protocol</td>
<td>149</td>
</tr>
<tr>
<td>Process for Monitoring Compliance and Effectiveness</td>
<td>149</td>
</tr>
<tr>
<td>Development and Consultation</td>
<td>149</td>
</tr>
<tr>
<td>References</td>
<td>149</td>
</tr>
<tr>
<td>Bibliography</td>
<td>149</td>
</tr>
<tr>
<td>Glossary of Terms</td>
<td>149</td>
</tr>
<tr>
<td>3.20 Further Advice and Support</td>
<td>150</td>
</tr>
<tr>
<td>3.21 Other Trust Policies</td>
<td>150</td>
</tr>
<tr>
<td>4. Process for Monitoring Compliance and Effectiveness</td>
<td>150</td>
</tr>
<tr>
<td>5. Development and Consultation</td>
<td>150</td>
</tr>
<tr>
<td>6. References</td>
<td>150</td>
</tr>
<tr>
<td>7. Bibliography</td>
<td>156</td>
</tr>
<tr>
<td>8. Glossary of Terms</td>
<td>159</td>
</tr>
<tr>
<td>9. Appendix 1 – Implementation Plan</td>
<td>161</td>
</tr>
<tr>
<td>10. Appendix 2 – Training Needs Analysis</td>
<td>165</td>
</tr>
</tbody>
</table>
1. Introduction

Hospitals are conducive to the development and spread of infection. Major reservoirs of pathogens include the patient’s own bacteria and microorganisms in the hospital and community environments. Infection can be introduced through people, equipment or contaminated products.

In 1988, the department of Health and Social Security and the Public Health Laboratory Service produced the guidance “Hospital Infection Control”, which all trusts follow. Application of the principles of Infection Control is a fundamental part of effective health care and an important aspect of risk management, (EL(93)ii).

All NHS organisations are required to put Infection Control at the heart of good management and clinical practice, to ensure effective protection of the public’s health and to minimise the risk of healthcare associated infections (HCAI’s). Effective prevention and control has to be embedded into everyday practice and applied consistently by everyone and all staff must demonstrate good infection control and hygiene practice. However it is not possible to prevent all infections.

Infection prevention and control has been given a greater prominence by the government, since it acknowledged that no risk is more fundamental than the risk of infection. The Chief Medical Officer issued guidance for action by Trusts and introduced the post of Director of Infection Prevention and Control to ensure that improvements are made, and the Comptroller and Auditor General for the House of Commons recommended that the work carried out by the ICT had to be commensurate with the staff required, (DoH 2003).

The Department of Health is firmly committed to reducing HCAI and the Infection Control Service has been further developed and influenced by Standards for Better Health (2004), Towards Cleaner Hospitals and Lower Rates of Infection (2004), The Savings Lives Programme to Reduce HCAI and Includes MRSA (2005) and Essential Steps to Safe Clean Care (2006). This has culminated with the Health Act 2006, The Code of Practice for the Prevention and Control of Healthcare Associated Infections which means that all NHS bodies have a duty to comply with the act and the Healthcare Commission are tasked with reviewing compliance to the code.

For a person to be infected, there has to be a source, bacteria, virus or other organism that can cause the infection, and there has to be a means of transmission of that infection. Control measures are designed to eliminate the source, or break the chain of transmission to halt the spread of the disease.
Decontamination, be it of hands, environment, equipment or medical devices is crucial to preventing a source of infection, and the use of protective clothing and equipment is another line in this defence.

For many common infections and infectious diseases, early recognition and prompt action can reduce the spread of disease, the severity of the illness and the number of people infected. Mersey Care NHS Trust expects its staff to adhere to Infection Control Guidelines to ensure high standards of care are applied to protect patients, staff and visitors from unnecessary exposure to infection, and the Health Act provides the organisational strategy to establish high standards of infection control.

Patients and their relatives rightfully expect care to be delivered in an environment where risks are proactively reduced and the control of healthcare associated infections is a high priority in every part of the Trust and this can only happen if effective prevention and control is put into everyday practices and adhered to by all staff.

Standards of cleanliness are often seen as a visible sign of the overall quality of care provided. A key component of providing consistently high quality cleaning is the presence of a clear plan, setting out all aspects of the Hotel Service which defines:

- Clear specific duties for cleaning, portering and laundry.
- Clear agreed and displayed cleaning routines.
- Sufficient staff to keep the environment clean, and laundry and waste removed from clinical areas.

Working to the NHS Standards for Cleaning and the Health Act ‘Code of Practice for the Prevention and Control of Healthcare Associated Infection’ will ensure that patients are cared for in a clean environment where the premises, equipment, fixtures and fittings are kept clean, that sufficient clean linen is provided to meet individual wards needs, that waste and used laundry is removed daily, to ensure that infection control risks are minimised and that each part of the Trust has detailed arrangements which meet the cleanliness required for each individual area.

Cleaning frequencies determine how often cleaning tasks are carried out and it is crucial that not only are they adhered to and monitored, but that checks and spot cleaning will be included and carried out when spillages, accidents occur, as reported by staff, patients or visitors and that this is built into the cleaning provision provided by the Trust.

Infection Prevention and Control Environmental Audits are carried out by Modern Matrons in conjunction with Hotel Services and ward staff bi
monthly, and by audits by the Infection Control Team annually. Any
deficiencies found on audit are reported by the Infection Control Team in
writing to the Ward/ Area Manager and the Domestic Supervisors with
detailed action plan. This ensures that shortfalls are addressed in a
practical and prioritised way. Results of audits are reported in the Infection
Control Annual Report which can be found on the Infection Control
website.

1.1 Rationale

The transmission of infection patient to patient, patient to healthcare
worker, or healthcare worker to patients, can have serious consequences,
which result in debilitating illness and even death. The cost of hospital
acquired infection is high and it is estimated that one in ten NHS patients
are affected by infection each year, (DOH 2003).

1.2 Scope of Policy

This policy applies to all patients and staff in the Trust, contract staff,
students, volunteers, locums and bank/agency staff, patients, carers and
the general public.

1.3 Principles

This policy is devised from government legislation, and national and
professional guidance.

- Mersey Care NHS Trust believes that prevention and control of
  infection is an important part of the overall risk management strategy of
  the health care environment, be it hospital or community care.
- The Trust is committed to minimising the risk of cross infection and re-
  infection from contamination of hands, environment, equipment or
  medical devices; and to providing hand hygiene products, protective
  clothing and equipment necessary to protect both patients and staff.
- There are agreed objectives and priorities for targeted surveillance of
  infection developed by the Infection Control Committee (ICC) and the
  Trust board.
- There is a procedure for monitoring and reporting untoward
  events/incidents associated with infection or that have the potential to
  produce unwanted effects involving safety of patients, staff or others.
- There is direct access for reporting of immediate infection control
  adverse events/incidents through the Director of Infection Prevention
  and Control and the Infection Control Doctor to the Chief Executive.
- There is a regular reporting of adverse events/incidents to the Infection
  Control Committee Meetings and annually to the Trust board.
1.4. Infection Prevention and Control Risk Assessment

The admitting nurse for any patient must assess the risk with regard to infection, prevention and control. If any risk is identified the appropriate action must be taken.

1.5. Reporting Incidents in relation to infection prevention and control

• All staff must report any breaches or non-compliance with infection prevention and control, via informing the relevant manager and completing a Trust Incident Form, as per the Incident Reporting Policy.
• All inoculation incidents must be reported.
• In the event of Meticillin Resistant *Staphylococcus Aureus* (MRSA) or *Clostridium difficile* being cited as the primary cause of death on the death certificate, a local investigation based on root cause analysis methodology will be undertaken and any actions implemented as appropriate. Copies of the report must be forwarded to the DIPC and Risk Manager who will review and determine whether a serious untoward incident has occurred.

1.6. Training in relation to Infection Prevention and Control

Staff must ensure that they attend infection prevention and control training in line with the Trust’s Training Needs Analysis and Mandatory Training Policy.

To access the current training needs analysis and the training requirements for each staff group please see appendix 2 for details – page 165

Infection Prevention and Control including Hand Hygiene Training will be provided on all Induction Courses for new employees to the Trust.

After each Induction Course the Induction Co-ordinator will monitor those people who attended against those who were booked onto the course. If employees failed to attend in full, the Induction Co-ordinator will inform the employees line manager and request that they be booked onto the next Induction Course.

The Induction Co-ordinator will also inform HR of the non-attendance who will check with the Line Manager to assess if there are any valid reasons for this.

The Induction Co-ordinator will track any employees who have not attended, or failed to complete in full, the corporate induction. If after 3 months the employee has still not fully completed the induction the induction co-ordinator will notify HR who will inform the employees Line Manager and Director and request that this is completed as soon as possible. Failure to do so may result in action being taken against the employee. Compliance with this will be reported to the Executive Director for Organisational Development on a 6 monthly basis.
For all other infection control training, including hand hygiene, the Infection Control Team will maintain a register of those staff who require training as per the Training Needs Analysis. The Infection Control Administration Team will ensure that staff are notified of when courses are available for them to attend, that they are booked on and have attended the required training. The Team will ensure through line management arrangements that staff attend at the required frequency.

Managers will check with staff at their annual appraisal that they have received the appropriate training. If staff have not attended, it is up to the manager to inform the Infection control Team who will notify the manager of the next available date when a course is available.

The Infection Control Nurse Manager will produce a report for the Trust Health & Safety Committee twice a year detailing compliance with the requirements of the Training Needs Analysis.

Refresher Training is a mandatory requirement for all staff, and will need to be repeated as determined by the Training Needs Analysis.

After each refresher course the Infection Control Administration Team will monitor those people who attended against those who were booked onto the course. If employees failed to attend in full, the Team will inform the employees line manager and request that they be booked onto the next available course. Line Managers must ensure that staff receive training within the timescales required by the Training Needs Analysis.

All training records will be maintained by the Infection Control Administration Team.

All training will be carried out by suitably qualified trainers from within or outside the Trust. All trainers will have recognised accreditation with a current Trainers Certificate in place.

1.7. Information for patients, and public in relation to Infection Prevention and Control

- All staff are required to inform patients, visitors, carers, contract and partner organisation staff, locums and the general public of their duties relating to infection prevention and control.

- Patients and visitors must be advised of their responsibilities in relation to infection prevention and control. Leaflets are available in all ward areas and are also available from the infection control team.

- Information for patients and the public regarding the arrangements in place for preventing and controlling health care acquired infections is available in this policy, on the Infection Control section of the Trust website and via the Trust Board minutes and compliance with the annual health-check declaration.
1.8 Infection Control Assurance Framework.

As per clinical and corporate governance requirements, all healthcare organisations are required to have an effective Infection Prevention and Control Assurance Framework in place, ensuring compliance with the Health Act 2006, which has been approved by the Trust Board and is regularly monitored, both internally and externally. Within Mersey Care NHS Trust this assurance framework consists of the following:

- Having an identified Director of Infection Prevention and Control (DIPC), who reports directly to the Board of Directors
- Having an established and functioning Infection Prevention and Control Team which consists of the following
  - Director of Infection Prevention and Control
  - Infection Control Doctor, Consultant Medical Microbiologist
  - Infection Control Nurse Manager
  - Infection Control Nurses
  - Secretarial/Admin/Clerical Support
- Having an Infection Prevention and Control Committee, which oversees the Annual Infection Prevention and Control Work Programme and reports regularly to the Trust Board via the Clinical Governance Committee and the DIPC (see 2.2. for membership).
- Having Infection Prevention and Control link personnel in all clinical areas.
- Having a framework to ensure that all incidents with regards to Infection Prevention and Control are reported, investigated appropriately and lessons shared across the organisation via the trust health and safety committee.
- Conducting internal audits to ensure compliance with the Hygiene code, Standards for Better Health and NHS Litigation Authority Standards.
- Having a framework to ensure adherence to standards set by external regulatory bodies e.g. Department of Health, Healthcare Commission, Nursing and Midwifery Council, General Medical Council, Overview and Scrutiny Committee.
- Having a framework to ensure that data is reported via the Trust’s surveillance policy and any national or regional targets with regards to Infection Prevention and Control are performance managed effectively.
- Produce and publish an Annual Infection Prevention and Control Report
- Having a framework to ensure that any lessons learned from external investigations or high level enquiries are implemented across the Trust
2. **Policy**

The aims of this policy are to:

- Have a management strategy in place which meets the Code of Practice and ensures that the design and maintenance of the environment meets with good Infection Prevention and Control practice.
- Inform and educate all health care workers of the important public health function in both hospital and community environments, of the prevention and control of infectious and communicable diseases, and of the application of researched practice.
- Inform healthcare workers of the transmission, incubation, infectivity of many common infectious diseases and the prompt action, which can reduce the spread of disease.
- Explain the principles of prevention and control of infection, decontamination and the use of protective equipment by which staff can reduce the risk of infection to themselves and to others.

A vital tool for healthcare workers which embodies the principles of best practice is to follow the Standard Principles to control the spread of infection.

2.1 **Duties**

In order to ensure that management systems are effective duties of staff groups/individuals are clarified as follows:

2.1.1 **Chief Executive (CE)**

The CE on behalf of the Trust Broad has overall and final responsibility for ensuring that management systems are in place for the effective, safe management of infection prevention and control within the Trust. These will include

- the provision of an appropriately constituted and functioning Infection Prevention and Control Team which reports on adverse incidents, infection data, progress with the service plan, policies and annual report to an Infection Control Committee (ICC); The Trust Board receives the Infection Control Committee minutes, and supports and approves the ICT Service Plan and Annual Report.
- ensuring direct links from the ICT and the Infection Control Committee with the Governance Committee to ensure compliance with the Health Act 2006, Code of Practice for the Prevention and Control of Healthcare Associated Infection, guidance and best practice, and for
ensuring that contracts are in place with Approved and Accredited Laboratories.

• ensuring the safe management of risks associated with Infection Prevention and Control and in the provision of an environment that is clean, has sufficient isolation facilities to meet the trusts needs, staff hand wash basins that are fit for purpose, and the provision of safety sharps devices required to minimise infection.

2.1.2 The Director of Infection Prevention and Control who is also the Executive Director of Nursing and Social Care

The Director of Infection Prevention and Control has the primary responsibility for, and reports to, the Trust Board. Key responsibilities include:

• Production of Trust Annual Report for Infection Prevention and Control. This includes providing the Trust with regular reports/updates on issues in relation to Infection Prevention and Control

• Development of the Trust strategy for Infection Prevention and Control working in partnership with the ICT.

• Monitoring of HCAI as appropriate in the Trust and review any subsequent local investigations, determining whether further scrutiny is required

• Membership of the Trust Infection Control Committee and raising any relevant issues

• The continuing education of the ICT to ensure the provision of up to date expert advice on matters relating to infection control, information and appropriate management of infection and infected patients.

• Ensuring that the infection control team are involved in all key trust committees to provide expert advice and channels of communication regarding progress of services to infection control standards and risks and that all Service Managers include an ICN as a member of their Risk, Governance and Health and Safety Meetings.

• The Executive Director of Nursing and Social Care is responsible for ensuring that there is an appropriate infrastructure in place to deliver the Trust’s Infection Prevention and Control agenda, standards of clinical competence, the implementation of Essential Steps competencies and the initial provision of updated Royal Marsden clinical procedures manuals

2.1.3 The Medical Director

The Medical Director is responsible for overseeing auditing of antibiotic usage and compliance with the antimicrobial guidance and the reporting of infections and treatment in discharge letters and for auditing compliance.
2.1.4 The Infection Control Doctor / Consultant Microbiologist

Infection Control Doctor / The Consultant Microbiologist is responsible for providing the Trust with microbiology advice and supporting the Infection Control Nurses. Responsibilities include

- Chairing the Infection Control Committee, Outbreak Committee meetings and for the Terms of Reference and the membership of the Infection Control Committee
- Providing clinical leadership, in reducing preventable infection across the Trust
- Reporting serious outbreaks of infection to the Consultant in Health Protection

2.1.5 The Director of Human Resources and Organisational Development

- The Director of Human Resources and Organisational Development is responsible for the provision of corporate Induction and Mandatory Training, the inclusion of Infection Control and Hand Hygiene Training and the recording of staff attendance.

2.1.6 The Director of Estates and Facilities

- The Director of Estates and Facilities is responsible for ensuring Infection Prevention and Control expert advice is included in all new builds, refurbishment and replacement programmes, and hygiene standards and frequencies, cleaning materials and equipment, contracts for waste, laundry and legionella management.

2.1.7 The Service Managers

The Service Managers are responsible for performance management ensuring that there are systems in place to implement the policy via:

- Ensuring that all trust staff, including agency, locum, contractors and volunteers attend corporate Induction and Mandatory Infection Control Training sessions, specially arranged Infection Control Training for services and that all clinical areas have an IPCLP who attends training has time to provide cascade hand hygiene training and the audit of hand hygiene compliance.
- Are responsible for ensuring that all wards and departments achieve good standards of environmental hygiene and are provided with the personnel, equipment and agreed trust products to achieve this.
• The Service Managers are responsible for ensuring the weekly provision of data regarding admissions to acute trusts and the monthly statistics of MRSA and Clostridium difficile are provided to the ICT on time.

2.1.8 The Infection Control Nurse Manager (ICNM)

The ICNM is responsible for

• The provision of a 24 hour on call service,
• The Infection Control Service Plan and Annual Report, reporting of progress made in achieving the objectives of the plan.
• Updating the Infection Prevention and Control Policy in line with current legislation and best practice and ensuring that the ICT provide expert advice on policies associated with Infection Prevention and Control.
• Leading on the educational content of the trust infection control curriculum and programme for all staff.
• Implementing and monitoring the annual infection control audit programme which will audit a selection of Infection Prevention and Control Policies, procedures and practices which will annually include as a minimum.
  • Hand hygiene facilities and techniques of all clinical areas and community teams.
  • Sharps and clinical waste of all clinical areas and community teams
  • Environmental audit of all wards and day hospitals and the ICT will update the audit tools in line with legislation, guidance, best practice.

2.1.9 Infection Prevention and Control Nurses

The Infection Control Nurses have the responsibility for

• Monitoring prevalence of HCAI via the surveillance programme.
• Reporting on all aspects of surveillance, prevention and control of infection in the trust to the Infection Control Doctor and the DIPC
• Reporting serious outbreaks of infection to the Consultant in Health Protection
• Implementation of the annual work programme
• Working with the Service Managers, Modern Matrons and Infection Prevention and Control Link staff to improve patient care, implement legislation and guidance and best practice to improve Infection Prevention and Control compliance and supporting operational decisions
• Education of healthcare staff on infection prevention and control
• Provision of evidence/assurance for assessments in relation to Infection Prevention and Control e.g. Standards for Better Health, Health Act.
• For liaising with other departments and agencies with regard to the transmission of disease, and adverse incidents and infections.

2.1.10 Infection Prevention and Control Link Personnel (IPCLP)

The IPCLP are responsible for
• Cascading information to ward /departments,
• Liaising with the ICT
• Cascade training of infection prevention and control and hand hygiene as agreed with the ICT
• Attending IPCLP meetings
• Undertaking ward/departmental audits in accordance with the audit programme

2.1.11 Modern Matrons

Modern Matrons are responsible for ensuring that:
• Regular audits of environmental hygiene, hand hygiene, sharps and clinical waste and legionella controls are undertaken to ensure compliance with policies and practice
• Liaising with and supporting the ICT in the delivery of the infection prevention and control agenda
• Meeting regularly with the ICNM to provide regular updates on infection prevention and control issues in their area
• Action plans are undertaken to rectify any issues identified
• Provide regular cleanliness reports to the Board via the ICNM

2.1.12 Ward/Department Managers

Ward/Department managers are responsible for ensuring that:
• Staff working in areas for which that manager has responsibility are aware of the Trust’s infection prevention and control policy and guidelines
• Staff attend infection prevention and control and hand hygiene training, as per Trust Training Policy
• Agreed trust hand hygiene products, safety sharps devices to prevent needlestick injury, cleaning products and equipment are provided at all times

2.1.13 Individual

Infection Prevention and Control is everybody’s business, and every individual working within the Trust has a duty to act in accordance with the standards and procedures as
set out in the Mersey Care NHS Trust, Infection Prevention and Control Policy at all times.

2.2 Duty of Infection Control Committee (Core Membership)

The Infection Control Committee has a duty to oversee the Annual Infection Prevention and Control Work Programme and reports regularly to the Trust Board via the Governance Committee on all infection control activity. The membership for the committee is as follows:

- Executive Director of Nursing and Social Care/ Director of Infection Prevention and Control
- Infection Control Doctor, Consultant Microbiologist (ICD and Chair).
- Infection Control Nurse Manager and Nurses (ICNM/ICNs).
- Consultant in Health Protection.
- Consultant Psychiatrist, OPMHS.
- Deputy Director of Estates and Facilities.
- Deputy Director of Adult Mental Health Services.
- Service Manager Mersey Forensic Psychiatry
- Service Manager Responsible for Primary Health Care High Secure
- Chief Pharmacist.
- Head of Service Governance and Risk.
- Modern Matron, High Secure.
- Modern Matron, Learning Difficulties.
- Occupational Health Nurse Manager.
- Nurse Consultant Drugs and Alcohol
- Environmental Health Officer.
- Carer.
- Secretary.

2.3 Legislation and Guidance


A duty of Care for all NHS Bodies.

2.3.2 Public Health (Control of Disease) Act 1984 and Public Health (Infectious Disease) Regulations 1988

State that all notifiable and suspected cases are notified to the “proper officer” this is the Consultant in Health Protection.

2.3.3 The Health and Safety at Work Act 1974
All employers have a legal obligation to ensure that all employees are appropriately trained in the procedures necessary for working safely.

All employees have a legal duty to take care of themselves and others, and to co-operate with their employer and follow policies and guidelines so that they, and others are not exposed to Health and Safety Risks.

Employers and employees are accountable under this Act to ensure that the workplace is free from hazard, and it imposes specific obligations to ensure the microbiological safety of the hospital environment.

2.3.4 **The Food Safety Act 1990**

The Trust has a legal obligation to comply with the provisions and requirements of food legislation (FSA 1990).

2.3.5 **Environmental Protection Act 1990**

This act covers the safe disposal of clinical waste, ensuring that it is correctly sealed, tagged and stored for incineration prior to collection by a licensed disposal contractor.

2.3.6 **Hospital Infection Control: Guidance on the Control of Infection in Hospitals, DOH and PHLS (1995).**

The Chief Executive is responsible for ensuring that effective arrangements are in place for the prevention and control of infection. The provision of the infection control service is undertaken by Medical and Nursing staff who have the relevant specialist expertise, managerial interest and input at a strategic level.

The Infection Control Team have the primary responsibility for surveillance, decision making on the prevention and control of infection on a 24 hour basis, by providing advice to all grades of staff on the management of infected patients infection control problems, and for the preparation of relevant policies.

2.3.7 **Preventing Hospital Acquired Infections – Clinical Guidelines PHLS 1997.**

Hospital acquired infection is often referred to as the “silent epidemic” and is though to affect one million people worldwide on any given day, (WHO 1990).

The guidance describes good practice, techniques to be followed and recognises that hand washing is the single most important measure in infection control.
2.3.8 **Resistance to Antibiotics and other Antimicrobial Agents (HSC 1999/049).**

This circular states that high standards of health care and hygiene are required at all times, and instructs health authorities to “put infection control and basic hygiene where they belong, at the heart of good management and clinical practice, with appropriate resources”.


National evidence based guidelines for preventing health care associated infections.

2.3.10 **The Management and Control of Hospital Infection (HSC 2000/002)**

This circular states the action required by the NHS for the management and control of infection with a time defined plan.

2.3.11 **Getting Ahead of the Curve, a Strategy for Combating Infectious Diseases (Including other aspects of Health Protection).**

A report by the Chief Medical Officer DH 2002. This document introduced the new agency – The Health Protection Agency (HPA).

2.3.12 **Winning Ways – Working together to reduce Healthcare Associated Infection in England. Report from the Chief Medical Officer DH 2003.**

This document lays down seven action areas to be adhered to:-

- Active surveillance and investigation
- Reducing the infection risk from use of catheters, tubes, cannulae, instruments and other devices.
- Reducing reservoirs of infection
- High standards of hygiene in clinical practice
- Prudent use of antibiotics
- Management and organisation
- Research and development

2.3.13 **Towards Cleaner Hospitals and Lower Rates of Infection (2004)**

Cleanliness is one of the five most important issues for patients and cleanliness and infection control care are closely linked in the public mind.
New approach to empower patients with more knowledge to encourage them to demand the highest standards of hygiene.


The NHS aims to halve MRSA bacteraemias by 2008.

2.3.15 Essential Steps to Safe Clean Care (DH 2006)

A framework for ensuring compliance in the prevention of spread of infection.

2.3.16 Screening for MRSA Colonisation (DH 2006)

Recommends screening of at risk groups of patients.


Poor maintenance of foam mattresses and their covers may lead to staining of the foam or inner surfaces of the mattress covers. This damage can allow harbouring of micro-organisms and is a potential cause of cross infection. Proper care, maintenance and cleaning of mattresses and covers can minimise this risk. Mattresses/covers that are soiled with blood or body fluids pose a significant Infection Control hazard to patients and staff.

2.3.18 Notification of Reportable Diseases to the Health and Safety Executive (The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995) (RIDDOR).

The Health and Safety Executive must be notified in writing of any staff that has contracted a reportable infectious disease, any exposure to HIV, HBV, HCV, and any illness that has been caused by a pathogen, which presents a hazard to human health.

2.3.19 The Control of Substances Hazardous to Health Regulations 2003

Lays down a duty of care for employers which is essential to prevent risks identified from potential sources of harm.

This covers pathogenic micro-organisms as hazards which may require risk assessments and instructions on how to avoid contact, or lower the risk of infection as far as reasonably practicable.
2.3.20 Environment and Sustainability. Health Technical Memorandum 07-01; Safe Management of Healthcare Waste (DH 2007)

This document is a best practice guide to the management of healthcare waste.

2.3.21 Hospital Laundry Arrangements for Used and Infected Linen (HSG(95)18).

The provision of adequate laundry services is a fundamental requirement of direct patient care. This guidance sets out recommended procedures to meet this commitment.

2.4 Professional Guidance

2.4.1 Nursing and Midwifery Council (NMC)

Nurses are bound by the code of professional conduct to protect patients and colleagues from risk of cross infection. A vital tool for all healthcare workers which embodies the principles of best practice is to follow “Standard Principles”.

2.4.2 General Medical Council (GMC)

Doctors must protect patients from unnecessary exposure to infection by following safe working practices and implementing appropriate infection control measures.

Doctors must follow the UK Health Departments advice on immunisation and are advised to be immunised against serious communicable diseases where vaccines are available.

2.4.3 General Dental Council (GDC)

This guidance states that “there has always existed the risk of cross infection in dental treatment. Therefore, a dentist has a duty to take appropriate precautions to protect patients and colleagues from risk”.

3. Infection Control Guidelines and Policies

Explanation of Terms
Explanation of Terms and Risk Factors

**Infection**
This is when germs in or on the body have started to multiply and/or invade a part of the body where they are not normally found. The body develops a reaction leading to disease or illness.

**Cross Infection**
Is the transfer of germs from one person to another, this may or may not lead to illness or disease.

**Colonisation**
Is the term used to describe the presence of germs in or on the body (including wounds), but without any sign of illness or disease. The body is colonised with many germs the majority of which cause no harm and some are actually beneficial.

**Micro-organism**
Also know as germs. These are bacteria, viruses, fungi or protozoa. They are too small to be seen by the naked eye and can only be seen under a microscope. Most of these are harmless, many keep us healthy e.g. germs in the healthy bowel process vitamins essential to our well-being. Those causing disease are known as pathogens. Like all living things, micro-organisms require food, water, warmth and the correct atmosphere to flourish.

**Communicable Disease**
An infection which is capable of spreading from person to person.

**Spread of Infection**
Is usually spread by one of the following means:-

**Direct Spread**
Contact with contaminated blood, or body secretions particularly by staff hands that have become contaminated by body to body contact, and by transfusion of contaminated blood.

**Indirect Spread**
Contact with contaminated equipment such as razors or needles.
Airborne Spread
Of contaminated skin scales, aerosol spread via droplets from coughing and sneezing.

Vectors
Third parties such as cockroaches, fleas, flies, mosquitoes, all harbour infectious agents.

Sequence of Spread:-

The Organism
The source or causative agent

The Reservoir
The place where the organism normally lives.

Point of Entry
Different organisms have different modes of entry, e.g. Salmonella enters through the mouth; Tuberculosis enters through the nose and mouth and then into the lungs.

Point of Exit
Salmonella exits the body in faeces; Tuberculosis exits the same way it comes in, through the mouth or nose.

Method of Spread
All organisms need a method of getting to the person they will infect or colonise. Hands play a major part in spreading infection.

Susceptible Host
This is the person who will become ill.

3.1 Common Risk Factors Predisposing to Infection
Extremes of age (premature babies, frail elderly people).
Family history of infection.
Malnutrition or obesity
Poor personal hygiene, incontinence and general debility.
Immune suppression due to therapy or disease.
Recent antibiotic therapy.
Break in the skin (trauma, surgery, ulceration, trauma to tissues.
Vascular or urinary catheterisation, surgical drains.
Smoking.
Metabolic disorders.
Malignant diseases.
3.2 Decontamination of hands – Hand Hygiene Policy

3.2.1 Introduction

Hand washing is the single most important procedure for preventing hospital acquired infections. Body secretions, surfaces and hands of all healthcare workers can carry bacteria, viruses and fungi that are potentially infectious to them and others.

3.2.2 Rationale

Hand washing is known to reduce patient morbidity and mortality from hospital acquired infections. It causes a significant decrease in the carriage of potential pathogens on the hands.

3.2.3 Scope of Policy

This policy applies to all patients and staff in the Trust.

3.2.4 Principles

This policy is devised from government and professional guidance.

Mersey Care NHS Trust is committed to reducing the risk of hospital acquired infections by providing the hand hygiene products required to decontaminate hands, and the education and audit required to ensure compliance.

The Trust is committed to improving hand washing facilities in line with government guidance and this will be done through new builds and refurbishment programmes.

3.2.4 Policy

All NHS organisations are required to have in place effective systems to reduce hospital acquired infection and to demonstrate that prevention and control of infection is managed to minimise the risk of infection to patients and staff.

3.2.5 Duties

(For general overall duties please refer to section 2.1 p16)

The trust has a legal requirement to adhere to the Health Act 2006.

The Service Managers are responsible for:
• Ensuring that all trusts staff, including agency, locum, contractors and volunteers attend the Corporate Induction and Mandatory Infection Control and Hand Hygiene Training sessions.

• The provision of agreed trust hand hygiene products for the decontamination of hands being available in all areas of the service for use by trust staff, visitors and patients.

• Ensuring that ward and department Managers identify an Infection Control Link Nurse/person to attend ICLN Induction and Mandatory Training to facilitate cascade hand hygiene training, audit compliance and the return of training records to the ICT for reporting purposes to Key Trust Indicators.

• Ensuring that staff hand wash basins are fitted in areas are fit for purpose as advised by the ICT and which must include the patient bedroom areas.

The Infection Control Team are responsible for providing corporate Induction and Mandatory Infection Control Training, for Infection Prevention and Control Link Nurses/Professionals Role and Cascade Hand Hygiene and Mandatory Training, for providing the equipment required for IPCLN/P’s to train and audit hand hygiene compliance and for the hand hygiene training records and reporting on the key indicator.

The Infection Control Team are responsible for auditing the hand hygiene facilities and technique annually and for audit reporting to services and Trust Board.

The Ward Managers and Department Managers are responsible for ensuring that:
• hand wash facilities are functioning properly and that problems are reported and actioned quickly.
• hand hygiene posters are displayed as per audit requirements, and hand hygiene posters and stickers are displayed to raise visitor and patient awareness and compliance in washing hands.
• agreed trust products to decontaminate hands are at all staff and patient hand wash basins, ward entrances and for use by patients at meal times.

All staff are responsible for complying with the decontamination of hands policy and demonstrating high standards of compliance.
3.2.6 Legislation and Guidance


Health and Safety at Work Act 1974 - see page 21

Guidelines for Preventing Hospital Acquired Infections Standard Principles (EPIC 2000) – see page 23


Section 4 – Action plan for high standards of hygiene in clinical practice.


Clean hands help to save lives.

3.2.7 Standard Principles for Hand Hygiene

This advice applies to all grades of staff and all disciplines.

Hand washing is the single most important procedure in preventing cross infection.

Patients are put at potential risk of developing a hospital-acquired infection when a health care practitioner has contaminated hands. Hands must be decontaminated before every episode of care that involves direct contact with a patient’s skin, their food, invasive devices, or dressings, and after any activity or contact that potentially results in hands becoming contaminated.

Hands that are visibly soiled or potentially grossly contaminated with dirt or organic material must be washed with liquid soap and water which will remove transient micro-organisms and leave the hands socially clean. This level of decontamination is sufficient for general social contact and most clinical care activities.

The effective use of alcohol-based hand rubs on contaminated hands will also result in substantial reduction of transient micro-organisms, although alcohol is not effective in removing dirt nor is it effective against Clostridium difficile. Alcohol hand rubs offer a practical alternative to hand washing.
3.2.8 Effective Hand Washing Technique Involves Three Steps, Preparation, Washing and Rinsing, and Drying.

Preparation requires wetting hands under warm running water before applying liquid soap. (This helps to prevent irritation and dry skin which are more likely to support bacteria). Hands should be rinsed thoroughly and dried with good quality paper towels.

The hand wash solution must come into contact with all surfaces of the hands. The hands must be rubbed together vigorously for a minimum of 10 to 15 seconds paying particular attention to the tips of the fingers, the thumbs and areas between the fingers.

Hands washing diagrams must be displayed in clinical areas. Audits and gentle reminding of staff who have omitted the practice will contribute greatly to improved care and reduction in cross infection.

3.2.9 Hand Cream and Skin Care

Apply emollients regularly to protect skin from the drying effects of regular hand decontamination. Hand cream that contains emollients is important in maintaining skin integrity.

Hands can become more dry and sore and this has been shown to increase the potential for cross infection of microorganisms. If you encounter skin problems, please contact your Occupational Health Department.

Process for Monitoring and Compliance – see page 150
Development and Consultation – see page 150
References – see page 150
Bibliography – see page 156
Glossary of Terms – see page 159
AYLIFFE TECHNIQUE

Effective Handwashing

1. Palm to palm
2. Right palm over left dorsum and left palm over right dorsum
3. Palm to palm fingers interlaced
4. Backs of fingers to opposing palms with fingers interlocked
5. Rotational rubbing of right thumb clasped in left palm and vice versa
6. Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa
WHEN TO WASH YOURS HANDS

BEFORE

• Staring work
• Leaving work areas
• Performing invasive techniques
• Putting on gloves
• Caring for a susceptible patient
• Entering and leaving isolation rooms
• Preparing or handling food

BEFORE AND AFTER

• Touching wounds and dressings
• Giving medication
• Touching urinary catheters and intravenous lines
• Emptying urinary drainage bags

BETWEEN

• Contact with different patients

AFTER

• Personal contamination – using the toilet, blowing or wiping the nose
• Contact with blood and body fluids
• Touching contaminated objects eg suction bottles, specimen pots, bedpans, urinals
• Caring for patients with specific organisms such as MRSA and other multi-resistant organisms
• Removing gloves
• Making beds
• Handling contaminated laundry and waste
3.3 Decontamination of the Environment

Good hygiene is an integral and important component of a strategy for preventing hospital acquired infections, (DH Towards Cleaner Hospitals and Lower Rates of Infection, July 2004).

Hospitals are conducive to the development and spread of infection, which can be introduced through people, equipment or contaminated products. The application of the Principles of Infection Prevention and Control is a fundamental part of effective care, an important aspect of risk management.

The transmission of infection from patient to patient, patient to healthcare worker or healthcare worker to patients can have serious consequences which result in debilitating illness and even death. Control measures are designed to eliminate the source or break the chain of transmission of infection to halt the spread of disease. Decontamination, be it of hands, environment, equipment or laundry is crucial in preventing a source of infection and the use of protective clothing and equipment is a line of defence.

3.3.1 Standard Principles of Environmental Hygiene

The hospital and community environments must be visibly clean, free from dust and soilage and acceptable to patients, their visitors and staff.

Patients and their relatives rightfully expect care to be delivered in an environment where risks are proactively reduced and the control of healthcare associated infections is a high priority in every part of the Trust and this can only happen if effective prevention and control is put into everyday practices and adhered to by all staff.

Standards of cleanliness are often seen as a visible sign of the overall quality of care provided. A key component of providing consistently high quality cleaning is the presence of a clear plan, setting out all aspects of the Hotel Service which defines:

- Clear specific roles and responsibilities for cleaning, portering and laundry.
- Clear agreed and displayed cleaning routines.
- Sufficient staff to keep the environment clean, and laundry and waste removed from clinical areas.

Working to the NHS Standards for Cleaning and the Health Act ‘Code of Practice for the Prevention and Control of Healthcare Associated Infection’
will ensure that patients are cared for in a clean environment where the premises, equipment, fixtures and fittings are kept clean, that sufficient clean linen is provided to meet individual wards needs, that waste and used laundry is removed daily, to ensure that infection control risks are minimised and that each part of the Trust has detailed arrangements which meet the cleanliness required for each individual area.

Cleaning frequencies determine how often cleaning tasks are carried out and it is crucial that not only are they adhered to and monitored, but that checks and spot cleaning will be included and carried out when spillages, accidents occur, as reported by staff, patients or visitors and that this is built into the cleaning provision provided by the Trust.

Infection Control Environmental Audits are carried out by Modern Matrons in conjunction with Hotel Services and ward staff bi monthly, and by unannounced audits by the Infection Control Team annually. Any deficiencies found on audit are reported by the Infection Control Team in writing to the Ward/ Area Manager and the Domestic Supervisors with detailed action plan. This ensures that shortfalls are addressed in a practical and prioritised way. Results of audits are reported in the Infection Control Annual Report which can be found on the Infection Control website.

All NHS staff have to attend Infection Control Training. The Trusts Corporate Induction and Mandatory Training Programmes include sessions on Infection Control.

3.3.2 Walls, Ceilings and Floors

3.3.3 Furniture and Fittings

All surfaces should be kept clean and free from dust and finger marks. If decontamination is required spray with high level disinfectant.

3.3.4 Sinks and Toilets

Only furniture and fittings that are easily cleaned and can withstand decontamination should be purchased for clinical areas, and disposable curtains should be seriously considered. Prior to disposal of surplus, broken or old furniture and fittings decontamination must be carried out and a decontamination certificate attached. See page 36.

3.3.5 Contamination Certificate
DECLARATION OF CONTAMINATION STATUS

Prior to Inspection, Servicing, Repair, Condemning or Return of Medical Devices and Other Equipment

Make and Description of Equipment:

Model/Serial/Batch No: __________________________

Tick box A if applicable. Otherwise complete all parts of B, providing further information as requested or appropriate.

A. □ This equipment/item has not been used or been in contact with blood, other body fluids, respired gases, or pathological samples. It has been cleaned in preparation for inspection, servicing, repair, condemning or transportation.

B. □ 1. Has this equipment/item been exposed internally or externally to hazardous materials as indicated below?

   YES/NO Blood, body fluids, respired gases, infected wounds, pathogens or pathological samples:
   YES/NO Other biohazards:
   YES/NO Chemical or substances hazardous to health:
   YES/NO Other hazards:

2. Has this equipment/item been cleaned and decontaminated as per Infection Control Prevention and Control of Infection Policy guidelines?

   YES – Indicate the methods and materials used:
   NO – If the equipment/item could not be decontaminated please indicate why:

   Equipment that has not been decontaminated must not be returned/transported without the prior agreement of the MCT Infection Control Team, and must not be collected/transported unless written instruction is received from the MCT Infection Control Team.

3. Describe how the equipment/item has been packaged to ensure safe handling/transportation.

I declare that I have decontaminated the above stated equipment/item, in accordance with the MCT Infection Control Prevention and Control of Infection Policy IC01 – Decontamination of Equipment Section.

Authorised signature: __________________________
Unit: __________________________
Name (printed): __________________________
Dept: __________________________
Position: __________________________
Tel No: __________________________
Date: __________________________

MCT Infection Control Team can be contacted on 0151 471 2635
All hand wash basins should be cleaned at least daily and more frequently if use demands this. Sinks should be cleaned with Virkon spray and leave for 10 minutes and then clean off. If heavily stained sanitiser may be used. Always ensure that the sink is well rinsed after using sanitiser. Pay particular attention to cleaning the taps and the sides and underneath of the sink.

Communal toilets must be cleaned at least twice a day and more often if used frequently. They should be checked in between cleaning and if necessary clean between scheduled cleans when accidents have occurred.

Toilets should be cleaned with high level disinfectant. Pay particular attention to the handle, push flush, seat, lid and outside of the toilet as well as the inside. If heavily stained sanitiser may be used or limescale cleanser.

During an outbreak frequency of cleaning toilets and sinks will be increased.

3.3.6 Bathrooms and Showers.

Showers must be run for 2 minutes every day to prevent Legionella. Baths and showers and bath mats must be disinfected daily with high level disinfectant.

Baths and showers and bath mats must be cleaned after every use so cleaning products must be available for staff to use.

3.3.7 Carpets.

Carpets should not be in use in any clinical area, but where they are currently fitted, they must be vacuum cleaned regularly and kept free from dust, dirt and spillages.

The only exception will be during an outbreak of respiratory infection (ie Influenza/ Pandemic Flu) when vacuum cleaning will be limited to machines which have a Hepa-filtration facility.

3.3.8 Domestic Rooms and Equipment.

These rooms and the equipment used must be kept in optimum condition and it is unacceptable to have dirty equipment being used in any ward area.
3.3.9 Body Fluid Spillages

Disinfection is required for body fluid spillages.

Staff must deal with body fluid spillages that occur in the area in which they work at the time of the spillage, unless the spillage covers a large area or is in connection with a sudden death.

Any staff responsible for decontamination has a duty under the Health and Safety at Work Act to do so safely and correctly to ensure that the workplace is free from hazard. All areas should have Virkon sachets easily accessible to use.

For splashes of body fluids on walls, and surfaces, these can be cleaned by emptying a sachet of Virkon granules into a bucket of water, (or by using a dedicated Virkon spray bottle and place 1 tablet of Virkon into a 500ml trigger bottle and fill with water). Put on a pair of household gloves and using disposable cloths or paper towels, spray walls and surfaces thoroughly, and leave for 10 minutes then wipe dry. Dispose of cloths or towels into a clinical waste bag or bin.

For body fluid spillages, contain and disinfect by emptying Virkon granules onto the body fluid spillage and leave to absorb for 10 minutes. Then wearing disposable gloves, brush the granules up and dispose of it into a clinical waste bag or bin. Wash the dust pan and brush in hot soapy water, rinse and leave to dry.

3.3.10 Large Blood Spillages, Dried Blood and Faecal Smearing (Dirty Protests).

This is a non-nursing/non domestic duty. Contractors are to be brought in.

During office hours, the Nurse in Charge must contact the purchasing department at Ashworth to bring in contractors.

Out of hours, the Site Manager and the Infection Control Nurse are authorised to contact React and Auto Cleanz who are equipped and competent at cleaning and guarantee that the environment is free from bacteria and viruses. For other parts of the Trust, Directors will agree who can contact the contractors.

Lock off the contaminated area until it has been cleaned. If the spillage is in a passageway or day area that cannot be isolated please contact the Infection Control Nurse for advice.
3.3.11 Daily Cleaning and Terminal Cleaning of Rooms, Bays and Wards after an Infectious Incident or Outbreak.

Whether a ward has a single infectious incident or an outbreak of infection the routine cleaning will be increased and when the patient or patients are free from infection the single room, bay or in the case of an outbreak ward will be deep cleaned.

3.3.12 Cleaning Process

- The cleaning process be it for a single room, bay or ward must be coordinated with the Nurse in charge.

- Adherence to the NHS colour code system is **absolutely essential**.

- Cleaning of a single room or bay will be carried out after all other ward areas have been cleaned and after the patient has been showered or bed bathed and the bedding has been changed.

- Collect equipment to be used (mops, buckets, disposable cloths, high level disinfectant, disposable paper roll, clinical waste bag and household waste bag).

- Wash and dry hands.

- Make up Virkon solution for mopping and solution for the trigger bottle.

- Put on disposable gloves and apron and mask if indicated.

- Methodically work round the room and spray door, light switches, shelves, ledges, radiators, surfaces and edges, bed side lockers, opening cupboard doors and drawers and chair with Virkon and if en-suite is facilitated spray sink, taps and outside of basin and the toilet seat, handle/plunger and outside of toilet and leave for 10 minutes to decontaminate.

- Remove any household waste.

- Clean all areas methodically as sprayed and pay particular attention to parts of the doors that are touched frequently by hands and dry doors, furnishings and fittings with disposable paper and dispose of same into clinical waste bag or container as you move around the room.

- Mop the floor with Virkon solution and then dispose of mop head into clinical waste container.

- Remove gloves and plastic apron and put into clinical waste container.
• Leave the room taking all equipment and sealed clinical waste carrier.

• Empty bucket into domestic sluice, wash the bucket with hot soapy water, rinse and leave to dry inverted. Wash the stale of the mop and dry with disposable paper.

• Wash and dry hands and then fit new mop head and store.

• Remove clinical waste to stored locked area.

• Wash and dry hands.

3.3.10 Terminal Cleaning of Rooms, Bays or Ward

This is carried out at the end of an incident of infection or outbreak, when informed by an Infection Control Nurse and must be coordinated with the Nurse in charge and the Domestic Supervisor. Terminal cleaning must be carried out before the ward can be re opened to admissions.

After some infections (Norovirus, Rotavirus) all curtains and blinds will need to be steam cleaned or taken down for washing and the Domestic Supervisor will liaise with colleagues in Portering and Laundry Services to coordinate provision of clean linen and removal of clinical waste and soiled linen.

Adherence to the NHS colour code system is absolutely essential, as is the process of cleaning.

• Whether terminal cleaning of a single room, bay or ward the process is the same. Start to the right of the side room, bay or ward and work methodically around the area.

• Nursing staff will remove all bedding room by room and will fold it, bag it and remove to collection area.

• If curtains are to be washed they must be taken down next and bagged and removed to collection area.

• Move around each room spraying the door, light switches, fitments and fittings including the bed frame (not the mattress) and all cupboards, shelves inside and outside with Virkon solution.

• Thoroughly clean every thing in the room and then dry off with disposable paper towel and dispose of into the clinical waste container.
• Nursing staff will follow behind and they will spray and decontaminate the mattresses.

• The floor will then be mopped with Virkon or if carpeted will be cleaned.

• En-suites will be cleaned after the bedroom, change gloves and equipment as colour coding indicates.

• Move around the bay or ward in a methodical process so that no area is missed and nursing staff can follow behind.

• Curtains will be replaced by separate staff if available following on after each area has been deep cleaned, or at the end of the total clean.

• At the end of the deep clean all contaminated mop heads will have to be disposed of into the clinical waste, and all equipment used will be washed and left clean.

• The domestic supervisor will ensure that the porters will remove all the soiled linen and the clinical waste, as soon as completed (as the Ward cannot be operated until infected linen and clinical waste has been removed).

• The domestic equipment used will be thoroughly decontaminated and the room that it is stored in is to be left clean and tidy.

**NB/**

Cleaning cloths will be used for one area only and disposed of into clinical waste.

### 3.3.11 Decontamination of Area or Facility etc Prior to Inspection and Repair

If an area has been contaminated by a toilet or sink being blocked, then the area or facility should be cleaned as far as is possible (flood, body fluid spillage cleared, remove obvious blockage if possible) and the area that the contractors are to work in should be decontaminated with Virkon and a contamination certificate fixed near by.

### 3.3.12 NHS Colour Coding for Cleaning.

This standard will be adhered to throughout the Trust and a colour coded poster must be displayed in the domestic room.
National Colour Coding Scheme

Red
Bathrooms, washrooms, showers, toilets, basins and bathroom floors

Blue
General areas including wards, departments, offices and basins in public areas

Green
Catering departments, ward kitchen areas and patient food service at ward level

Yellow
Isolation areas
3.4 DECONTAMINATION OF LINEN (Laundry Policy)

3.4.1 Introduction

The germs present in most soiled and foul linen are unlikely to cause infection in healthy workers provided Infection Control Guidelines are adhered to.

3.4.2 Rationale

All linen must be laundered in line with the NHS Directive to ensure the decontamination of used and infected linen to minimise the risk of infection to staff and patients, (HSG(95)18).

The Trust has an obligation under the Health and Safety at Work Act to take steps to prevent the risk of infection to staff handling and laundering linen.

3.4.3 Scope of Policy

This policy applies to all patients and staff in the Trust.

3.4.4 Principles

Mersey Care NHS Trust is committed to reducing the risk of cross infection to staff and patients from contaminated linen.

The Trust is committed to providing adequate supplies of linen and timely supplies of clean linen.

3.4.5 Policy

This policy will inform health care workers of action to be taken to minimise risk, the temperature to be achieved to ensure decontamination, the colour coding of bags to be used and the personal protective equipment required for carrying out this procedure.

3.4.6 Duties

(For general overall duties please refer to section 2.1 p16)

The Chief Executive is responsible for ensuring that laundering of items carried out in any part of the Trust complies with the health service
guidelines, and that when laundering services are contracted out that the HSG advice is incorporated into the contract.

The Service Managers are responsible for ensuring that staff are provided with personal protective equipment (gloves, aprons etc) to wear when handling used, soiled, foul or infected linen.

The Modern Matrons and Ward Managers are responsible for ensuring that staff wearing personal protective equipment fold and bag used, soiled, foul or infected linen in such a way as to minimise the risk of infection.

All staff are responsible for wearing the personal protective equipment provided and for adhering to this Policy to minimise the risk of infection, and for ensuring that linen is bagged correctly.

The Laundry Manager is responsible for ensuring that laundry staff adhere to this policy.

Contracts staff are responsible for ensuring that HSG guidelines are written into the contract.

3.4.7 Legislation and Guidance

HSG (95) 18 Hospital Laundry Arrangements for used and Infected Linen.

This document provides health service guidelines on the provision of adequate laundry services which is a fundamental requirement of direct patient care. It sets out the recommended procedures to meet this commitment and covers the handling and laundering of linen and the importance of disinfection and infection control.

Health and Safety at Work Act 1974 – see page 21

The Control of Substances Hazardous to Health Regulations 2003 - see page 24

3.4.8 Risks to Laundry Staff

To minimise the risk of infection, the laundry staff must:-

- Be trained to carry out laundry procedures
- Wear waterproof aprons and disposable gloves when dealing with used laundry
- Cover skin wounds with water proof dressings
- Have adequate hand washing facilities nearby
• Never eat or smoke in the laundry room.

3.4.9 Laundering of Linen

All the Trusts bed linen and towels must be laundered by the Trust, or the Trusts contracted agent.

Used linen is to be laundered at no less that 71°C for a minimum of 3 minutes or at 65°C for a minimum or 10 minutes.

Infected, blood contaminated or foul linen must be placed inside a red soluble bag. The bag is to be transferred to the washer without opening it. Under no circumstances should infected linen be processed in a batch continuous washing machines because of the risk to staff, should a blockage occur.

3.4.10 Linen Bagging Procedure

Health care workers wearing disposable gloves are to place soiled linen into the linen bags avoiding the creation of dust. Linen should be placed into bags as close as possible to the bedside and the bathrooms.

Health care workers wearing disposable aprons and gloves are to place blood contaminated, foul and infected linen into red soluble bags. Linen from patients diagnosed with or suspected of having a communicable disease/infection, e.g. Salmonella, Norovirus, rotavirus, campylobacter, hepatitis, tuberculosis, etc should have their linen put immediately into sealed red soluble bags, and then into a red linen bag which must be fastened with press studs, or stringed eyelets.

This linen must not be sorted (e.g. sheets and towel separated).

It is the responsibility of clinical health care staff to adhere strictly to the colour codes to minimise the risk of infection to staff and patients.

Process for Monitoring and Compliance – see page 150
Development and Consultation – see page 150
References – see page 150
Bibliography – see page 156
Glossary of Terms – see page 159
3.5 CLINICAL WASTE (HAZARDOUS AND NON HAZARDOUS WASTE)

Introduction

Waste disposal is governed by the Environmental Protection Act (1990) and best practice of Healthcare Waste is covered by the DH (2006) Environment and Sustainability, Health and Technical Memorandum. Different classes of waste must be segregated into colour coded containers with the name and addresses of the source of the waste written on the outside. Producers of waste have a duty of care to ensure that the waste is safely managed at all stages of handling and transportation until its final disposal.

Infection Control Guidelines

All staff working in areas where clinical waste (Hazardous and Non Hazardous Waste) arises must adopt safe working practices and adhere to the Infection Control Guidelines. Failure to do so may result in prosecution.

The person in charge of every ward, department, area and home has a duty to ensure that all clinical waste is bagged/binned, tagged and stored appropriately for collection and incineration.

3.5.1 Categories of Waste

Waste regulations now require the classification of waste on the basis of its hazardous characteristics.

3.5.2 Non Hazardous Waste European Code 18.01.04

Non Hazardous Clinical Waste may be disposed of in orange waste receptacles (bins/bags) if contract and contractor can treat and dispose to render safe in alternative treatment plants, otherwise it has to be incinerated as hazardous infectious waste (yellow receptacles).

This was previously known as clinical waste, and this trust produces only very small amounts of hazardous infectious waste. Waste cannot be mixed. If segregation of waste does not occur, or cannot occur due to non provision of correct colour of waste receptacles by the contractor or the contractor cannot provide the different levels of disposal, then all waste will be treated as hazardous infectious waste.
Non Hazardous Waste

This is waste that has not been contaminated with blood or exudates from wounds and includes:

- Disposable gloves
- Disposable aprons
- Masks
- Bandages
- Dry Dressings
- Plasters
- Urine Bags
- Catheters
- Peg Feeds
- Paper Mache Urine Bottles, Bedpans, Bowls, Trays

3.5.3 Hazardous Infectious Waste, European Waste Code 18.01.03

This is the waste that has been contaminated with blood and exudates from infected wounds and includes:

- Paper towels if used to clean up spillages
- Virkon granules used for blood spillages and spillages from Outbreaks of diarrhoea and vomit.
- Swabs used for cleaning infected wounds.
- Dressings from infected wounds.
- Contaminated bandaging, tubigrip where exudates has leaked through from wounds.

This waste requires disposal by incineration and must go into yellow receptacles (bags/ bins).

3.5.4 Offensive Hygiene Waste European Waste Code 18.01.04 or 20.01.99

This is a large proportion of the clinical waste produced by the trust and consists of incontinence pads.

This type of waste should be disposed of utilising specific macerators, yellow and black striped (tiger bags), or yellow clinical bags and bins.

Installation of macerators for incontinence pads may be considered if the cost benefit is justified.
Sharps Containers

3.5.5 Sharps Yellow Top European Waste Code 18.01.03

These are provided for the disposal of sharps contaminated by medicinal waste and from venepuncture and are disposed for incineration.

The following should be disposed of into sharps containers:-
- Needles and syringes (needle pointing down).
- Glass ampoules.
- Razors.
- Giving sets.
- Stitch cutters
- Any other contaminated sharp.

3.5.6 Sharps Purple Top European Waste Code 18.01.08

These will be provided by Pharmacy when Cytotoxic or Cytostatic medication is dispensed. These have to be incinerated in permitted or licensed facility.

The labels on the sharps containers must be completed when a new box is brought into use.

The Trust has a duty to ensure that all sharps containers are stored securely, transported and incinerated, and are labelled/tagged to provide a tracking and monitoring of its disposal.

3.5.7 Amalgam Waste (European Code 18.01.10)

Dental amalgam is disposed of into white containers which has a mercury suppressant and requires a special contract, separate from that which covers hazardous infectious waste.

3.5.8 X-ray Waste (European Waste Code 0901)

Must be disposed of into a leak proof rigid container which has a mercury suppressant.

3.5.9 Mattresses Bulk Collection of Hazardous Infected Waste

Mattresses must be decontaminated with high level disinfectant. Place in mattress bag and complete contamination status certificate and attach to
Mattress bag. (contamination status certificates download from Infection Control Website) and mattress bags order from NHS Supply Chain.

**Mattress for disposal will not be collected unless decontaminated, bagged and certificate displayed. All condemned mattresses will require transporting to the Ashworth site for bulk disposal.**

### 3.5.10 Contaminated Medical Devices

Contact Infection Control for advice regarding decontaminating medical devices which are no longer fit for purpose and that cannot be disposed of via hazardous infectious waste e.g suction machines, Sphygmomanometers. After decontamination and packaging special arrangements will be made with a waste management contractor for disposal, by the lead person for Waste Management and Contamination Status Certificates must be completed and attached.

### 3.5.11 Non Hazardous Bulk Waste - e.g. Redundant Furniture

Redundant and condemned furnishings must be decontaminated as described in 3.12 if coming from any clinical area and have a contamination status certificate attached. Furnishing whether from clinical or non clinical areas should be considered for reuse and advertised on facilities admin website.

Contact Waste Lead or Estates Department to arrange removal.

### 3.5.12 Key Points to Minimise the Risk

- All waste containers either partially full or awaiting collection must be stored safely and be inaccessible to service users, children and members of the public.
- Ensure that sharps bins are put together correctly and that the lid is locked down and aperture locked shut.
- All sharps and clinical waste being disposed of in yellow receptacles (bags/bins) must only be filled to 2/3 rds full and secured and tagged- legal requirement.
- All clinical waste containers (30 – 60 litres) must have lids fastened securely.
- All clinical waste bins 360 and 820 litres must be kept locked.
- Record book must be completed when tag is issued and tags to be used in sequential numbers. (Tags are supplied by the Estates department). Bags should be carried by the neck and away from the body and should never be dragged or thrown.
3.5.13 Collection of Clinical Waste from Hospitals and Departments

Each ward/department has a designated waste storage area which must be kept locked. All waste and waste containers will be removed as arranged locally, and collected by the portering services. All staff handling waste must exercise due care and attention to avoid injury and or risk of infection. Personal protective equipment must be worn.

Any bags/bins that are not effectively sealed or labelled will not be removed.

3.5.14 Collection of Clinical Waste from Homes or Departments in the Community

A special collection of clinical waste and sharps is arranged with the local authority, and clinical waste containers stored in the grounds must be kept locked.

The trust has a duty of care to ensure that all clinical waste is securely stored, transported and incinerated. The identity tagging system is essential for tracking and monitoring disposal.

3.6 Personal Protective Equipment

3.6.1 Standard Principles

Expert opinion suggests that the primary uses of personal protective equipment are to protect staff and reduce opportunities for transmission of micro-organisms in hospital, and community settings.

3.6.2 Gloves

Gloves should be worn to:-

- Protect the hands from contamination with organic matter and micro-organisms or from sharp objects.
- Reduce the risks of transmission of infection to both patients and staff.
- Protect the hands when using cleaning products.

Gloves must be worn when:

- In contact with blood or body fluids, secretions or excretions.
- Carrying out invasive procedures or when in contact with sterile sites, or non intact skin or mucus membranes.
• Cleaning during an incident of infection (1 case) or an outbreak of infection (2 or more cases) disposable gloves must be used and disposed of after cleaning each room.
• Cleaning and using cleaning products (and the NHS Colour Code must be adhered to).

Gloves must be worn as a single use item:

• Put gloves on immediately before patient contact or treatment and removed as soon as the activity is completed.
• Change gloves between caring for different patients or between different care treatments for some patients.
• Gloves must be disposed of as clinical waste.
• Hands must be decontaminated following the removal of gloves.

### 3.6.3 Types of Gloves

The Trusts provides:

• Disposable gloves in all clinical areas that are latex free and conform to European Community Standards that are of an acceptable quality, and non sterile gloves should be used as the norm.
• Sterile gloves should only be used for invasive procedures.
• Rubber marigold type gloves are provided for domestic cleaning.
• Industrial gloves are provided for the portering staff for the handling of clinical waste and tins.
• Protective puncture resistant gloves are provided for the handling of sharps.
• Powdered and polythene gloves should not be used in health care activities. Evidence suggests that cornstarch powder used to assist the putting on of gloves is harmful and is associated with adhesions, latex allergy and increasing risks of infection associated with invasive devices contaminated with cornstarch powder, (ICNA 1999), MDA (1998), (Hanjlund and Junghanns 1997). (Gernardt 1989).

**Polythene gloves are not suitable for clinical use due to their permeability and tendency to split and damage easily**

### 3.6.4 Plastic Aprons

Are provided for basic protection from blood or body fluids. They are designed to be single use and should be changed after contact with infected patients.

Disposable plastic aprons must be worn when:
Infection Prevention and Control Policy

3.6.5 Masks

Must be worn when:

- Using powder cleaning substances.
- Using toxic spray cleaning substances.
- During an outbreak of infection where aerosol contamination is a risk, e.g. Influenza and Pandemic Influenza or if a patient has open and active TB of the lung and is in the first 14 days of treatment.

3.6.6 Eye Protection

Must be worn when:

- Powder cleaning substances or toxic spray cleaning substances are used.
- There is a risk of conjunctival exposure from blood or body fluids.

3.6.7 Coveralls

Are to be worn when dealing with patients who have been involved in “dirty protests”. They are single use only and dispose into clinical waste.

3.7 Collection and Transport of Specimens

The Health and Safety at Work Act 1974 and the Management of Health and Safety at Work Regulations 1999
Puts a requirement of law on contractual services and the users of their services that “all employees have a legal duty to take care of themselves and others, to work safely, follow guidelines and ensure that others are not exposed to health and safety risks”.

“Employers and employees are accountable under this act to ensure the work place is free from hazard, and it imposes specific obligations to ensure the microbiological safety of the environment”.

Control of Substances Hazardous to Health Regulations 2003

“COSHH regulations set out the duty of employers to manage the risk of exposure to hazardous substances which is essential to prevent risks identified from potential sources of harm. This covers exposure to pathogenic microorganisms”.

3.7.1 Specimen Containers

When collecting a specimen, care must be taken to avoid contaminating the outside surface of the container, and the request form. The container used must be appropriate for the purpose and properly closed. The request form must contain enough information to allow the specimen to be handled safely by the laboratory staff.

3.7.2 Labelling for Danger of Infection

Specimens suspected or known to contain a hazard group 3 or 4 pathogen must have a biohazard label attached to the specimen and request form. Examples of group 3 or 4 pathogens are: HBV, HCV, HIV, Salmonella, Shigella etc.

- Staff must wear gloves and aprons when handling specimens.
- Only approved laboratory containers are to be used.
- Containers must be labelled with the patient’s name and date of birth, date of specimen collection and specimen details.
- Hazard labels must be applied on specimens from patients with known or suspected infections.
- The specimen must be placed in a plastic transparent specimen bag as soon as it has been labelled.
- The bag must be sealed.
- The request form should be placed in the adjoining section of the specimen bag.
- Staff must enter the specimens into the record book provided.
- Packaging of specimens should be of good quality and strong enough to withstand shocks and loading normally encountered during carriage and including movement between vehicles and buildings.
• Transport of specimens should be contained within two layers of containment, the second being robust and leak proof with a lid that can be secured in transit.
• Transportation of specimens will be in biohazard marked containers and all vehicles carrying specimens must display biohazard signs on the vehicle in case of an accident which requires assistance from others.

Specimen handling must be kept to a minimum. It is best practice that the person who takes the sample should put it in the box for transportation to the lab.

3.8 Invasive Devices

Many patients become infected because their body’s natural defences are breached when catheters, drips, drains, and feeding lines are inserted as part of the process of care, (Winning Ways 2003). Reducing the risk of infection and providing evidence based guidelines which have been researched extensively; EPIC Guidance 92001), NICE (2003), Essential Steps to Safe, Clean Care 2006, EPIC 2 2007, have provided guidance and competency training for the trust's staff to implement and adhere to.

Catheterisation

Urinary tract infections (UTI's) are the largest single group of healthcare infections (23%), and the presence of the urinary catheter and the duration of its insertion are contributory factors to the development of UTI's (Emmerson 1996).

Catheter associated urinary tract infections (CAUTI's) are caused by micro-organisms on the patient's skin which can gain easier entry to deeper tissues or the bloodstream when catheters are introduced.

Bardex silver alloy coated catheters have been researched proven to reduce CAUTI's by 32 – 69% due to the slow release of silver ions and the hydrogel coating which reduces the ability of bacteria to bond to the catheter surface.

All staff involved in catheterisation and catheter care must be trained to the Essential Steps of Safe Clean Care, Aseptic technique and catheter insertion and continuing care.

The Clinical Team must also assess the need for catheterisation:
• Only use indwelling urethral catheters after considering alternative methods of management and even then only for the shortest time possible.
• Document the need for the catheterisation.
• Document the date of insertion, care and date of removal in the clinical notes as a matter of routine.
• Review regularly.

Enteral Feeding

This is the means of providing nutrients and delivering them into the gastrointestinal tract by tube feeding.

The National Institute for Health and Clinical Excellence found that 30% of feeds were contaminated with a variety of micro-organisms due to poor preparation or poor administration of feeds (2003). Enteral feeding is widely used both in hospital, care homes and in the community and it is a life sustaining treatment.

All staff involved in enteral feeding must be trained to the Essential Steps of Safe Clean care, Aseptic technique and enteral feeding which covers the preparation and storage of feeds, administration of feeds and care of insertion site and enteral feeding tube.

Education of the patient and their carers is also integral to the prevention of the infection.

Intravenous Lines

The Clinical Team must assess and document the reason for the intravenous line and it will only be used when there is no suitable alternative for the shortest time possible.

Insertion and removal of lines will be undertaken by a trained and competent staff using strict aseptic technique.

The date of insertion and date of removal of the device must be documented in the clinical notes as a matter of routine.

3.9 Aseptic Technique

All staff will follow the guidelines in the Royal Marsden Hospital Manual of Clinical Nursing Procedures (7th ed).
http://www.royalmarsdenmanual.com/online/toc.asp
Each clinical area will display the nine step aseptic procedure poster and will only use the associated dressing packs.

The Service Managers are responsible for ensuring that Essential Steps for Safe Clean Care is implemented and that all staffs practice is observed and compliance noted on the scoring sheets certificated, and recorded in their personal records. This will be cascaded through the service and standardised across the trust and will be audited to monitor compliance.

3.10 Transfer and Discharge of Patients with Infections

All clinical areas must inform on transfer or discharge the receiving area, the ambulance or transport staff, the relevant General Practitioner of the infectious status of the patient.

All infections treated or being treated must be noted in the discharge note and in the clinical notes with the diagnosis and treatment prescribed.

3.11 Death of a Patient

When the Police or Coroner give permission for the body to be moved, then precautions used for handling infectious patient’s remains are a necessity. To minimise the risk, it is essential that:-

- Gloves and apron are worn when handling the patient or soiled clothing and linen
- Only heavily soiled areas of the body are to be washed
- The body is to be placed into the body bag
- If the patient is diagnosed as having HIV, HBV, HCV, TB or Typhoid, then a danger of infection label must be attached to the outside of the bag to alert the Mortuary staff of the risk of infections, (CDSC 1999) and (Presentation of Remains from Hospitals and Nursing Homes Conclusion of Funeral Standards Infection Control Working Party 1998).

3.12 Immunisation of Staff and Patients

Immunisation is an important way of avoiding infection amongst staff and patients. However, immunisation is not available against all infections neither is it guaranteed to be 100% effective.

**Chickenpox/Varicella**

The Joint Committee on Vaccination and Immunisation (JCVI), states varicella immunisation is now recommended for non-immune health care workers who work directly with patients. DH PL/CMO/2003/8.
Hepatitis A and B

This is recommended for patients who are diagnosed as carriers of Hepatitis C.

Hepatitis B

Immunisation against hepatitis B is recommended for:
- all staff who have patient contact
- all staff who handle patient laundry
- all staff who handle patient property
- staff involved in collecting clinical waste
- all patients

Meningitis

This vaccine is recommended for all 17 to 22 year olds and the Responsible Medical Officer must check if vaccination has been carried out.

Influenza

This vaccine is recommended for certain front line staff, and at risk patients.

Tuberculosis

Occupational Health will carry out a pre-employment check and if BCG is required, vaccination will be offered.

Storage of Vaccination

Vaccine must be stored in drug fridges at 2+ to 8+ ºc, and should be stored in the original packaging and protected from light. All vaccines are sensitive to heat and cold which will affect the potency of the vaccine.

Vaccine removed for transport to clinics must be kept at the same temperature by using cold packs.

Spillage of Vaccine

Spillages of vaccine should be covered with Virkon granules, left for 10 minutes and then brushed up and disposed of into clinical waste.
Spillages on the skin should be washed off with soap and water.

If a vaccine is splashed into the eyes, the eyes should be bathed with sterile 0.9% sodium chloride solution and medical advice should be sought.

3.13 Staff Uniform, Clothing and Dress Code

Provision of Uniforms

Directorates and Services that employ staff who wear uniforms should ensure that sufficient uniforms are issued to enable the staff to have a uniform for each day of work and a spare one.

Uniforms and Clothing

A clean uniform or clean clothing should be worn every day.

Laundering of Uniforms and Clothing

Few hospitals now launder staff uniforms and staff are expected to wash uniforms and work clothing in their own domestic machines. However there is little information or research on the effectiveness of home laundering. The RCN advise that uniforms should be washed separately and on a hot wash, and that they should be stored in a polythene bag ready to be worn. Patel et al (2002) considered that domestic laundering of uniforms is an acceptable alternative to hospital laundering if combined with tumble drying and ironing. National guidelines are available for hospital laundry processes but domestic washing machines do not reach and maintain 65°C for ten minutes. Washing uniforms and clothing worn to work which may be contaminated with bacteria, Patel et al states that washing in a domestic washing machine is sufficient to remove heavy contaminations of Staphylococcus aureus.

Dress Code

Please see Trust Appearance and Workwear Policy

Infectious Diseases

In this section information is given regarding the infections, and advice on how to prevent the spread of infection. A doctor will have diagnosed most of the diseases and managers are requested to inform the Infection Control Nurse of any staff or patient who has been diagnosed as having an infectious illness.
3.14 A to Z listing of infections follow.

**Acinetobacter**

This is a type of bacteria which normally lives in the environment in soil and water and can sometimes be found on the skin of healthy people who carry it harmlessly.

There are at least 30 different species of Acinetobacter and a few of these particularly Acinetobacter baumannii cause infections in hospital patients who are already very ill.

These hospital adapted strains are sometimes resistant to many antibiotics and the infections that they cause can be very difficult to treat, and cause pneumonia, wound infections, septicaemia and meningitis.

**Transmission:**  
Person to person spread.

**Standard Precautions:**  
Good hand hygiene

**Prevention:**  
Environmental cleaning  
Disposal of exposed medical equipment.

**Acquired Immune Deficiency Syndrome – AIDS**

AIDS is the case defined condition of an HIV infected person who develops one of a number of opportunistic infections that are associated with the syndrome.

Full blown AIDS does not coincide exactly with any absolute level of CD4 cell count, but it is likely to occur when the count falls below 0.4 – 0.2 x 10⁹/l. Many AIDS patients have counts far below this and may have undetectable counts for months prior to death.

**Infecive Material**  
Blood and body fluids contain HIV virus and other organs may be infected with opportunistic microbes.

**Duration**  
Lifelong – chronic infection
**Precautions**  
Follow Standard Principles.  
Avoid contamination with blood and body fluids.  
Avoid inoculation.

Please see the Infection Control Blood Borne Virus Policy.

**Campylobacter enteritis**

Is the commonest cause of bacterial food poisoning in the UK. Most cases are associated with the consumption of contaminated poultry, though it has occasionally been linked to unpasteurised milk and untreated water.

Campylobacter is an acute illness, the incubation period is usually three to four days, but can be up to ten days. This is followed by 24 hours of fever, headache, and prostration. The main illness consists of diarrhoea which is watery and may be bloody. Vomiting may occur at the onset and abdominal pain is constant.

Diagnosis is by sending a stool sample for culture to the microbiology laboratory.

**Infective Material**
Contaminated poultry. Unpasteurised milk and untreated water. Faecal matter.

**Incubation**
Usually 3 to 4 days, occasionally 1 to 10 days.

**Duration**
Can be infectious until treated with a course of antibiotics and until 48 hours after diarrhoea has ceased. Can be ill and weak for a number of weeks.

**Precautions**  
Follow Standard Principles.  
Wear gloves and apron when in contact with any body fluids, and when collecting specimens. Wash hands thoroughly.

See guidelines to be followed for outbreaks of Diarrhoea and Vomiting which follows the section on diarrhoea.
Candidiasis

Candida albicans is a yeast that is part of the normal flora of the skin, mucosae and bowel. It normally protects from invasion and infection, but it only requires wetting and slight grazing of the skin for infection to occur. Antibiotic treatment increases the likelihood of candidiasis.

It commonly occurs in warm, moist areas, eg under the breasts, in the natal cleft or under the abdominal ‘apron’ of the obese. Moist lesions can produce sticky exudate, drier lesions appear shiny and flaky.

Diagnosis of lesions and cheesy exudates strongly suggests candidiasis. Most candidal infections respond well to topical antifungal treatments.

Cellulitis

An infection of subcutaneous tissue, with inflammation of the overlying skin. It often results from a penetration injury or local lesion which has allowed the ingress of bacteria anywhere on the face or body.

The commonest causes of cellulitis are Streptococcus pyogenes and Staphylococcus aureus. It responds well to antibiotic treatment.

Chickenpox (Varicella)

Chickenpox (Varicella) is caused by the Varicella – zoster virus, which has an incubation period of two to three weeks. Infectivity usually starts from five days before and until five days after the first appearance of the rash, but may be prolonged in immuno-suppressed patients.

Transmission is usually by the respiratory route although direct contact with the vesicles is also a source of infection. Crusted scabs are not infectious.

Chickenpox is highly contagious and only staff who are known to have had Chickenpox should attend to the infected patient. Any staff who report with no immunity must be sent to Occupational Health for blood test and if no immunity is confirmed may be advised to stay off work.

Patients with Chickenpox can be very ill and may need to be admitted to the Infectious Disease Unit.

Transmission

Highly infectious, by direct contact, droplet infection, or contact with recently soiled materials, eg hankies.
Incubation Period
14 to 21 days.

Period of Infectivity
Five days prior to rash and five days from the onset.

Duration of Infectivity
Until all vesicles have scabbed over.

Precautions
Immunisation for health care workers who are not immune, and have direct patient care. This is recommended to protect susceptible staff and vulnerable patients from acquiring chickenpox from an infected member of staff or patient.

Follow Standard Principles.
Wear gloves when in contact with infected patients and linen.
Wash hands thoroughly

NB  Pregnant staff who have had contact with a patient or staff diagnosed as having chickenpox must contact the Occupational Health Department or Infection Control Nurse urgently to have their immunity status checked.

Following an attack of Chickenpox, the virus may persist permanently in the sensory nerves. Later in life reactivation of this latent infection may occur as “shingles”, ie an eruption of the skin over the area supplied by the effected nerve.

Chlamydia trachomatis Genital Infection

Can affect the eye, genital tract and urethra, and in infants only may cause respiratory tract infections, sore throat, laryngitis and pneumonia.

Diagnosis is made by sending a urethral or endo-cervical swab for culture.

Clostridium difficile Policy

Introduction

There is a growing awareness that Clostridium difficile infections pose a significant risk to public health. The incidence has increased dramatically in the last decade with the emergence of new and very virulent strains, in particular ribotype 027 strain, which has high attack rates in the elderly and increased attack rates in other age groups.
Clostridium difficile is the most commonly diagnosed bacterial cause of infectious hospital acquired diarrhoea. It is an anaerobic spore forming gram positive bacterium that produces toxins. This infection is nearly always associated with and triggered by the use of antibiotics, prescribed to treat another condition or used prophylactically, as they alter the gastrointestinal flora and this enables the organism to grow, (Jenkins 2004), and the normal bacteria that colonise the gut are destroyed and this allows the growth of Clostridium difficile which releases toxins causing severe inflammation, (Vaughan et al 2006).

Infected patients excrete large numbers of bacteria which rapidly produce spores in order to survive, they contaminate the environment, (bed linen, mattresses, bedframes, commodes, toilets, sinks, taps, towels, floors, mops), and are extremely resilient. Symptoms can range from a brief episode of diarrhoea to 20-30 episodes daily of explosive watery and foul smelling diarrhoea, severe dehydration, fever, abdominal pain and life threatening pseudomembraneous colitis with necrosis predominately affecting the colon which can lead to a grossly dilated or perforated bowel, (Borriello 1998), and (Sunenshine and Mc Donald 2006).

**Rationale**

To minimise mortality and transmission of infection by effective isolation, vigilance and adherence to Infection, Prevention and Control Measures.

**Scope of Policy**

This Policy applies to all staff and patients of Mersey care NHS Trust.

**Principles**

This Policy is devised from government guidance and legislation which requires all trusts to have a Clostridium difficile Policy.

Mersey care NHS Trust believes in minimising the risk of Clostridium difficile infection by adherence to the trusts Antimicrobial Guidelines: Management of Common Infections, and by admitting any patient with explosive diarrhoea or who becomes symptomatic with explosive diarrhoea into a single room and implementing effective isolation and Infection Prevention and Control measures.

- All staff must adhere to strict and thorough hand washing with **soap and water** after every contact with the patient or the patients environment.

- **Please note-** alcohol gel is **not** as effective with Clostridium difficile infections and should **not** be used.
• All staff must adhere to the wearing of personal protective equipment, gloves and aprons and change them in between different elements of the patients care.

• All staff must adhere to the cleaning regime required for the decontamination of the environment in Clostridium difficile infections as stated in the procedure to be followed, see section, Cleaning, Daily and Terminal Decontamination.

Policy

All NHS Organisations are required to have in place effective systems to prevent and control hospital acquired infections, to demonstrate that prevention and control of infection is part of the overall risk management strategy and that there is a managed environment which minimises the risk of infections to patients and staff.

Duties

(For general overall duties please refer to section 2.1 p16)

The Chief Executive is responsible for ensuring that effective arrangements for infection prevention are in place for the trust. The Infection Control Team has direct access to the Chief Executive to appraise of adverse incidents or events and provides expert Infection prevention and Control advice 24 hours a day and are contacted through the trust switchboard.

The Chief Executive is responsible for providing sufficient isolation facilities to meet the needs of the trust and for the Service Level Agreement, with the pathology departments to provide rapid diagnosis within the 18 hour period.

The Infection Control Team is responsible for notification of the HPA and SHA of incidents and outbreaks of Clostridium difficile.

The Service Managers are responsible for:
• ensuring the monthly reporting of Clostridium data is received by the ICT in agreed time frame.
• providing isolation facilities in a single room with en suite facilities are provided on suspicion of diagnosis of Clostridium difficile.

The Medical Director is responsible for the training and audit of medical staff with regards to adherence of the trusts antimicrobial formulary.
The Modern Matron and the Ward Manager will ensure that all staff are aware of and comply with this Policy and the prevention and control measures to be implemented.

The Infection Control Team is responsible for:

- advising if antibiotic therapy is to be continued, for advising on the management and prevention control measures to be implemented, for collation of list of contacts if Clostridium difficile has been diagnosed in a patient who became symptomatic whilst being nursed in shared accommodation and will determine the closure of the ward to admission and transfers.
- providing Infection Control Training regarding Clostridium difficile to Infection Control Link Nurses which is to be facilitated and cascaded to all ward staff and the ICT will also provide training for the domestic staff.

All trust staff are responsible for adhering to this policy.

**Legislation and Guidance**

The National Clostridium difficile Standards Group (2003), the Healthcare Commission Report into the outbreak of Clostridium difficile at Stoke Mandeville Hospital (2006), the Health Protection Agency Clostridium difficile findings and recommendations from a review of the epidemiology and a survey of Directors of Infection Prevention and Control in England (2006), and the Chief Medical Officers, Healthcare Associated Infections, Operational Management of Clostridium difficile Associated Disease (2006) have all been incorporated into this Policy.

**The Health and Safety at Work Act 1974**- See page 21

**Notification of Reporting Diseases** to the Health and Safety Executive, (The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR).

**Professional Guidance**- See page 25

**Nursing and Midwifery Council (NML)**- See page 25

**General Medical Council (GNC)**- See page 25

**Infection Control Guidelines**

The prevention and control of Clostridium difficile is greatly assisted by the early reporting and isolation of patients who are symptomatic and suspected of having Clostridium, and it is desirable that the first sample of watery stools is collected and sent for culture and sensitivity and
Clostridium difficile testing (please note antibiotic history on lab request form) and this should be done within 18 hours of onset of symptoms or admission of symptomatic patient.

It is important to check the antibiotic history, and if antibiotics are currently being administered, this should be discussed by the Doctor with the trust Infection Control Doctor/Consultant Medical Microbiologist, and strict adherence to the trusts Antimicrobial Guidelines: Management of Common Infections, must be applied and monitored.

**Symptoms**

Explosive watery foul smelling diarrhoea which can be constant for 48 hours or more and up to 30 episodes daily, which is not only distressing for the patient but debilitating. Accurate record of patients bowel movement must be kept.

Abdominal Pain
Fever
Dehydration and Electrolyte Imbalance
Pseudo-membranous colitis which can lead to a dilated or perforated bowel.

**Transmission**

Direct patient to patient contact.
Contact with contaminated environment.
Infection from the hands of health care workers.

The most at risk are elderly or immunocompromised patients receiving antibiotics in a ward where there has already been an identified case of Clostridium difficile.

**Period of Infectivity**

Until diarrhoea has stopped and normal bowel action has occurred.

**Treatment of Symptomatic Clostridium difficile**

Oral Metronidazole 400mgs TDS for 10 days, if reoccurrence of symptoms or treatment is unsuccessful the ICD/ICT must be contacted.

Oral vancomycin may be used as the preferred treatment in severely ill patients it must be used with caution to lower the chance of creating vancomycin resistant Enterococcus, and this will be determined by the Infection Control Doctor.
Precautions

Isolation of patient in a single room with en-suite facilities or single room with named single person commode, or single room next to an identified toilet for sole use of infected patient. (If no single room is available every effort must be made to provide a room on the ward including consideration of moving a non infectious patient to another ward to provide one).

Furnishings and equipment in room must be kept to a minimum.

Visitors are to be requested to wash hands prior to leaving the isolation area and if the patient is experiencing profuse diarrhoea restricted visiting should be implemented until symptoms subside.

If an outbreak of Clostridium difficile occurs and insufficient single rooms are available then cohorting of infected patients in a bay may be advised, and the Major Outbreak and Isolation Policies will be adhered to and staff will follow the trusts guidelines for diarrhoea and vomiting.

Strict and thorough handwashing with soap and water after every contact with the patient, the patients environment. Do not use alcohol gel.

Use PPE, staff must wear gloves and apron which will be changed between delivery of different care tasks for the patient.

If a commode is used cover the bedpan and dispose of excreta immediately.

Treat all linen and clothing as infected, put in a red bag whilst in the room and tie it off, and on completion of care take straight to the porter collection point.

En suite, toilet or commode must be decontaminated after every use.

Patient must be washed after each episode of diarrhoea and the integrity of the skin and perineum is to be checked and treated with a barrier cream if required.

Patient hand hygiene must be adhered to, encourage patients to wash hands after using toilet and before meals, and if patients are too ill, then moist hand wipes should be offered and assist patient as required.

Isolation of patient must continue until 48 hours symptom free.
Discharge of Patient

Information must be included in the discharge letter to the General Practitioner of Clostridium difficile infection, so that antibiotic treatment can be avoided, and to monitor for relapse.

Please Note

Clostridium difficile can cause outbreaks and re-infection occurs in 20% of cases.

Communication

It is essential that everyone is aware of the Infection Control precautions that need to be in place.

Explain to patient and relatives why isolation is required and what Infection Control precautions are in place. It is also important to maintain the patient’s dignity and confidentiality.

All staff, both regular and visiting must be made aware of the importance of adhering to Infection Control precautions.

Cleaning, Daily and Terminal Decontamination

The environment around the patient can be heavily contaminated with Clostridium difficile spores which are difficult to remove. Frequent and meticulous cleaning of areas touched by the patient or contaminated by explosive diarrhoea (surface, cot sides, chair arms, commode, arm rests, toilets, sinks, tap tops, bathroom, ensuite, floors, areas around and including macerator etc) must be cleaned with a Chlorine based cleaning agent or product recommended specifically for this purpose by the trusts ICT.

The clean areas should be cleaned first and see Terminal Cleaning section in main Policy, for decontamination of environment which is carried out at the end of the infectious episode. Terminal cleaning for Clostridium difficile infection will be decontamination with either a Chlorine based product, or a product recommended by the trusts ICT, or by steam cleaning.
Creutzfeldt-Jacob Disease – CJD/New Variant CJD/Prions

CJD refers to human spongiform encephalopathies, degenerative brain diseases which are invariably fatal. They cause characteristic spongiform changes in the brain on pathological examination.

The causative agent is remarkably resistant to conventional sterilisation and disinfection techniques. It is thought that CJD is caused by infectious proteins known as ‘prions’ which are rogue forms of a normal protein found in the brain.

CJD has a long incubation period which is known to be up to 25 years or more in some types of the disease.

There are different types of CJD:

Sporadic or Classical CJD

This is currently the most common form. There are around 50 cases a year. It is very unusual in people aged under 40 years. The cause of classical CJD is unknown.

Variant CJD (vCJD)

Only recently recognised. 100 cases in total in the UK. It affects young people. Duration of the illness approximately 14 months. Early stages of illness patients experience a personality change and psychiatric symptoms such as depression. It is thought to be causally related to exposure to the agent that causes bovine spongiform encephalopathy in cattle.

Iatrogenic CJD

Associated with treatments administered in the 1970’s using human pituitary derived growth hormone and human dura mater grafts. A few cases have also been associated with corneal grafts and a few with contaminated instruments used in brain surgery.
Familial Prion Disease

Rare types of CJD that are familial.

This disease is characterized by the degeneration of the nervous system and is invariably fatal. CJD has been transmitted from person to person by medical procedures, as the infective agents cannot be inactivated by normal sterilisation procedures. Single use medical devices must be used.

Causes a pre-senile dementia, illness begins with clumsiness, ataxia, tremor, and progresses to intellectual and motor impairment, leading to death. The illness has a short duration after the onset of progressive symptoms, but varies according to the type of CJD, 3-4 months in classical CJD, 14 months in vCJD and 2-5 years in inherited forms.

Transmission
Diet. Medical Devices. Transplant of organs especially corneal grafts.

Diagnosis
Test for a protein '14-3-3' found in CSF. Detection of this protein supports the diagnosis of CJD.

Cryptosporidium

A parasite which causes diarrhoea. It can be contracted from food, milk, contact with farm and domestic animals, swimming pools and contaminated water.

It is an unpleasant, but self limiting diarrhoea with a sudden onset of gastrointestinal and sometimes 'flu like' symptoms coupled with a watery diarrhoea. Abdominal cramps, vomiting and loss of appetite are common, and the symptoms last for two to three weeks.

Transmission
Food, milk, contaminated water.
Contact with farm and domestic animals
Swimming pools.
Faecal oral route.

Incubation
Three to six days.

Duration
Two to three weeks, Infectious for duration of diarrhoea.
**Precautions**
Follow Standard Principles.
Wear gloves and aprons.
Hand hygiene.
Boil water.

**NB**  **Causes outbreaks**
See guidelines to be followed on outbreaks of diarrhoea and vomiting which follows the section on diarrhoea.

**Diarrhoea**

Infections of the gastrointestinal tract are among the commonest infections in all communities of the world. Intestinal infections are causing increasing illness even in England where water supplies and sanitation is of a high standard.

Diarrhoea is common and it does not always have an infectious origin. However, all cases should be taken seriously, as the most obvious effect of bowel infections are diarrhoea and vomiting.

**Imodium should not be administered until a sample has been obtained, and it is contraindicated if Clostridium difficile is suspected.**

It is important when collecting a sample to include the most liquid part of the stool. This is the likely location of pathogens.

**Infective Material**
Faeces

**Duration**
Infectious for the duration of the diarrhoea.

**Precautions**
Follow Standard Principles.
Wear gloves and aprons.
Hand hygiene.
Guidelines for diarrhoea and vomiting Outbreaks

- Report cases in patients and staff to the nurse in charge and the Infection Control Nurse.
- Closure of ward to new admissions may be recommended by the ICT.
- Inter-ward transfer and discharge is not usually advised.
- Restrict staff entering the ward to only those who genuinely need to be there.
- Patients should be encouraged to recover in their own rooms.
- Patients should bathe or shower daily.
- Bed linen, towels and night attire should be changed as soon as soiled and at least every day to prevent re-infection.
- Linen should be put into red linen bags.
- Bedrooms and en-suite area to be cleaned daily.
- Hand hygiene is paramount, all staff must wash their hands thoroughly after contact with patient and linen.
- All crockery, cutlery must be washed in the dishwasher.
- Ensure that sick patients have their TPR recorded twice daily.
- Patients with diarrhoea should have samples obtained and sent for Norovirus and C&S.
- Incident log number will be issued by the Infection Control Nurse and this is to be written on all lab forms.
- **Do not give Imodium until a specimen has been obtained, and immodium is contraindicated if Clostridium difficile is suspected.**
- Staff attending to patients confined to bed, when handling samples, or when cleaning up body fluid spillages will wear disposable gloves and aprons.
- Ensure that extra fluids are available to prevent dehydration, but do not give fruit juice as this may cause further diarrhoea.
- Encourage thorough patient hand washing after using the toilet.
- Ensure that there is an adequate supply of sample pots, bedpans, yellow clinical waste bags/bins, Virkon, disposable gloves and aprons, toilet paper, bed linen, towels, soap and red linen bags.
- Body fluid spillages must be covered immediately with sufficient Virkon to completely cover the spillage, leave for 10mins and then brush up and dispose into clinical waste. Wash the brush and dustpan in hot soapy water rinse and stand up to dry.
- Staff who arrive on duty or become unwell with diarrhoea and vomiting MUST GO HOME, and remain off duty for 48 hours after the last episode of vomiting or diarrhoea. If diarrhoea persists for more than 24 hours please contact the Occupational Health Department for a sample pot.
- Please report any further cases of staff or patients with diarrhoea or vomiting to the Infection Control Nurse, and in the case of an outbreak a member of the Infection Control Team will contact the ward/dept, on a daily basis.
Please note that in the event of an outbreak of diarrhoea and vomiting the Infection Control Team may give guidance regarding staff not being allowed to work in a non infected area for 48 hours following completion of a shift in an infected ward/dept.

**Diphtheria**

This is an acute bacterial infection of the tonsils, pharynx, larynx, nose and skin. Vaccination is offered during childhood.

The disease is spread by respiratory droplets from the nose and throat, and close face-to-face contact with a carrier is required for infection to occur.

Diphtheria is characterised by an insidious onset with a mild fever, and grey or white membrane present on the tonsils or soft palate. In the majority of cases, cardiac problems occur in the second week of the disease.

**Infective Materials**
Respiratory droplets from the nose and throat, transmitted through coughing and sneezing.

**Incubation Period**
Two to five days.

**Duration of Infectivity**
If untreated, two to three weeks.
If treated with antibiotics, will be non infectious within 24 hours.

**Complications**
Cardiac problems during second week.
Cranial and peripheral nerve palsies two to six weeks.

**Escherichia coli (E coli 0157)**

E coli is a bacterial disease of the gastrointestinal tract. This organism ferments a wide range of sugars, and it is transmitted by contaminated food and water.

**Transmission**
Food borne and person to person

**Infective Material**
Contaminated food or water.

**Incubation Period**
One to five days.

**Sudden Onset**
Diarrhoea and vomiting.
Moderate fever.

**Precautions**
Follow Standard Principles.
Gloves and apron.
Wash hands thoroughly.

**NB Causes outbreaks**

See guidelines to be followed for outbreaks of diarrhoea and vomiting which follows the section on diarrhoea.

**German Measles (Rubella)**

Rubella is a systemic viral infection. Although it is highly infectious it causes a trivial disease, but it can affect the developing foetus causing tissue damage and developmental defects.

The clinical features include a mild sore throat and mild conjunctivitis or gritty feeling in the eyes, and then a rash appears on the third day.

**Transmission**
Is by air droplet spread infection or by direct person to person contact.

**Incubation**
17 to 18 days.

**Infectivity**
One week before onset of the rash and to at least 4 days following the onset of the rash.

**Precautions**
Follow Standard Principles. Pregnant women who have been exposed to/in contact with an infected patient or health care staff must contact Occupational Health and or the Infection Control Team.

**Treatment of Linen**
All linen and clothing to be treated as infectious.
Giardiasis

This diarrhoeal disease produces infectious cysts which are passed in the faeces of both sick patients and asymptomatic carriers. The cysts survive for many days in sewage contaminated water. It is spread by the faecal oral route.

The disease is common ‘in areas of poor sanitation’, institutions and nurseries. Giardia adheres to the intestinal tract and can cause malabsorption, rapid weight loss, severe diarrhoea, wind and greasy stools.

Infective Materials
Faeces

Duration
May last for weeks or months.

Treatment
Metronidazole 400mg TDS for seven days

Precautions
Follow Standard Principles.
Hand hygiene.
Gloves and aprons.

NB Causes outbreaks

See guidelines to be followed for outbreaks of diarrhoea and vomiting which follows the section on diarrhoea.

Glandular fever (Infectious mononucleosis)
Glandular fever (Infectious mononucleosis) is a virus infection causing, fever, enlarged and tender glands. It frequently causes a prolonged period of tiredness and debility.

Symptoms
Glandular fever often starts with headache, and tiredness. The major symptoms then develop, and may last seven to twenty one days including tender enlargement lymphadenopathy, about 10% develop a faint red rash on the trunk and limbs. Occasionally hepatitis and jaundice and splenomegaly occur.

After the initial symptoms have passed, most people continue to feel tired all the time, and are easily exhausted. This is frequently accompanied by depression.
**Causes**
The commonest cause of glandular fever is Epstein-Barr virus (EBV) another virus causing glandular fever like illness is Cytomegalovirus.

**Incubation period**
4 to 7 weeks; it is thought to spread in a similar way to many other viruses, from saliva.

**Infectivity**
Glandular fever may be infectious for weeks to months, but just over half of the population has developed immunity while young, with a milder form of the condition.

**Treatment**
There is no specific treatment for glandular fever.

**Hepatitis A (HAV)**
This is caused by an entero-virus which is found in the gut. Hepatitis A Virus is excreted in faeces. It is caught by eating a virus that someone else has passed.

**Transmission**
Is by faecal or oral contamination.

**Infective Materials**
Faeces and urine.

**Incubation Period**
Two to six weeks.

**Duration of Infectivity**
The patient is infectious for 2 weeks before the onset of Jaundice and for 7 days after developing the Jaundice.

**Prevention**
Close contacts may be offered Immunoglobulin vaccine. Hand hygiene is paramount for staff and the patient.

**Precautions**
Follow Standard Principles.
Wear gloves and apron.
Wash hands thoroughly.
Hepatitis B Virus (HBV)

Hepatitis means inflammation of the liver. Viruses are the commonest cause but drugs and alcohol can also disturb the body’s immune system.

Hepatitis B virus is present in virtually all body fluids – blood, saliva, vaginal secretions and blood have been found to be infectious to other people. HBV is transmitted in the same way as HIV, but it is far more infectious.

Transmission
Puncture wounds, i.e. sharps
Mother to baby
Unprotected sexual intercourse
Injecting drug users

Incubation
90 days.

Symptoms
Vary from no noticeable symptoms, to mild like flu like symptoms, nausea, vomiting, fever, jaundice, hepatic failure coma and death within 8 weeks.

Also see the Infection Control Blood Borne Virus Policy.

90 to 95% of adults who are infected with the Hepatitis B Virus will fully recover. 5 to 10% will become long term carriers. If the infection is acquired at birth, the majority of these children will become long term carriers. A small number of chronic carriers may go on to develop chronic active Hepatitis, cirrhosis or liver cancer.

Hepatitis B is a major concern for health care staff who are exposed to blood and body fluids.

The most important measure that health care workers can take is to be vaccinated against HBV.

Hepatitis C Virus (HCV)

Hepatitis C is a blood borne virus that causes liver disease. The effects of HCV differ from person to person. Many people will remain symptom free, some will develop cirrhosis and a few will develop liver cancer. Symptoms that some people may experience are:-

• Muscle aches and a high temperature.
• Mild to severe fatigue.
• Nausea.
• Loss of appetite.
• Weight loss.
• Depression or anxiety.
• Pain or discomfort in the liver.
• Jaundice.
• Poor memory or concentration.
• Alcohol intolerance.

It should be noted that the severity of symptoms does not necessarily equate to the extent of liver damage.

**Transmission**
Blood to blood contact.
Blood transfusion prior to 1991
Mother to baby transmission (rare)
Sexual contact (rare)

**Incubation Period**
Three to six months. Many people will be unaware that they have the virus for years.

**Tests**
An initial antibody blood test will indicate infectivity.

Please see the Infection Control Blood Borne Virus Policy.

**Herpes Simplex (Cold Sores)**

A cold sore is a cluster of tiny blisters caused by a virus called herpes simplex, which usually occurs around the edges of the mouth.

After you have been infected with herpes simplex, the virus stays with you for life, and can cause cold sores from time to time.

**Transmission**
The virus can be passed from person to person.

**Incubation period**
2 to 12 days.

**Infectivity**
Until lesions have crusted over, usually 10 days.

**Precautions**
Can be passed on by kissing. Health care staff must wear gloves if applying treatment or have direct contact through washing patients as they may get an infection around the finger nail (herpetic whitlow).

**Treatment**
In the vast majority of people, cold sores recover completely on their own with no treatment. If the cold sore spreads or causes an infection, then seek medical advice.

**Herpes Zoster (Shingles)**

Shingles is a rash with groups of blisters, which eventually crust over and form scabs. It usually only occurs on one side of the body. The rash is not itchy, but it is very painful. The pain may start a day or two before the rash appears.

**Transmission**
If you have had chickenpox, the virus which caused it stays in the body, usually in a nerve root. In later years (occasionally after a few months), the virus travels back up the nerve to the skin and causes a shingles rash. Or by direct contact with rash or by airborne infection.

**Incubation**
7 to 10 days.

**Infectivity**
For 5 to 7 days after lesions appear and until all blisters have crusted/scabbed over.

**Precautions**
Follow Standard Principles.
Health care staff must wear gloves during contact with infected person. Pregnant women who have never had chicken pox and have been exposed to a person with shingles must contact Occupational Health or Infection Control Team.

**Human Immunodeficiency Virus (HIV) (also see section on AIDS)**

HIV which causes acquired immunodeficiency syndrome (AIDS) is transmitted when body fluid from an infected person enters the body of an uninfected person.

HIV reduces immunity in people which can lead to the development of a number of opportunistic infections, various types of cancer and mental illness. The time period between becoming HIV positive and AIDS can
vary from less than 1 year up to 20 years. Therefore, many people are relatively well for years before developing AIDS.

**Transmission**
Through unprotected sexual intercourse with an infected person.
Sharing of contaminated needles.
Transfusion of contaminated blood/blood products.
From mother to baby.

**Incubation**
3 to 4 months.

**Testing**
Blood tests

**Infectivity**
From onset of HIV and for life.

**Precautions**
Follow Standard Principles.
Protective equipment.

Please see The Infection Control Blood Borne Virus Policy.

**Impetigo (also see Staphylococcus aureus; Streptococci (group A))**

A contagious skin infection caused by direct inoculation of group A streptococci or Staphylococcus aureus into superficial cutaneous abrasions or compromised skin.

It is most commonly seen in children, usually located on the face, especially about the nose and mouth.

The characteristic features are the presence of discrete fragile vesicles surrounded by an erythematous border that become pustular and rupture to discharge a thin, amber coloured seropurulent fluid that dries and forms a thick yellowish crust, the pustules may spread peripherally with central healing, evolving into annular, circinate or gyrate patterns.

**Transmission**
Direct contact with pus from lesions. Hand to hand contact.

**Incubation**
4 to 10 days, but can occur several months after colonisation.
Infectivity
Whilst lesions remain moist or until 48 hours after commencing antibiotics.

Precautions
Follow Standard Principles. Towels should not be shared. Staff should wear gloves when in contact with infected person, and when dealing with infected towels and linen.

Treatment
Antibiotics.

Influenza
Influenza presents as a non-specific febrile illness with headache, muscle pain, dry cough and abrupt onset. In uncomplicated cases the symptoms resolve in three to five days although a period of fatigue and depression may follow. For most people a bout of Influenza will be a nasty experience, but it is not usually life threatening.

Complications can occur and these are otitis media in children, bronchitis or pneumonia in adults, and the infecting organisms can be Streptococcus pneumonia or Haemophilus influenzae.

The disease can be more severe in adults particularly those with chronic diseases, immunosuppressed and the elderly. Death may occur within 24 hours of onset of illness or from complications such as pneumonia occurring. The period of infectivity is 3 to 7 days from onset of symptoms.

Transmission
By airborne or fine droplet transmission and by direct and indirect contact, through close contact with a coughing and sneezing infected person. The virus can survive for limited periods in the environment and transferred from contaminated surfaces onto hands.

Incubation period
48 to 72 hours.

Infectivity
3 to 7 days.

Precautions
Strict adherence to hand hygiene and environment cleaning is containment of respiratory secretions. Restriction of symptomatic workers and visitors.
Age
Most influenza infection is in children and young people, but the serious morbidity and mortality is mainly seen in elderly people with underlying chronic diseases.

Complications
The main complication of influenza is secondary bacterial infection, especially pneumococcal and staphylococcal pneumonia. Deterioration due to pneumonia can be very rapid and a high proportion of those who die do so within 48 hours of infection, so rapidly that antibiotics may have no effect.

Legionnaires' disease
Legionnaires' disease is a bacterial infection which may cause an atypical pneumonia. The majority of cases are reported as single (isolated) cases but outbreaks can occur. About 200 cases are reported each year in England.

Legionella are widely distributed in the environment. They have been found in ponds, hot and cold water systems, and water in air conditioning cooling systems.

Factors which increase susceptibility:
Age 50+ and men are 3 times more susceptible.
Chest conditions, asthma, chronic obstructive airways disease.
Immune compromised due to cancer, transplant or HIV/HCV treatment.
Smokers
Surgery
Alcohol diseases
Travel, more at risk of exposure when on holiday abroad (see HPA website for hotels and resorts).

Attack Rate of Infection:
1% in community incident.
5% in a hospital incident due to vulnerability of those exposed.
Impaired health in some survivors affecting the heart and debris and scar tissue in the lung can cause degeneration and restricted breathing which requires long term oxygen therapy.

**Transmission**
Inhalation in aerosols from contaminated water systems, which travel to the depths of the lung.

**Incubation**
Usually 2 to 4 days but can range from 2 to 10 days from exposure.

**Diagnosis**
By urine test.

**Treatment**
Antibiotics against the infection are effective in treating the disease.

**Symptoms**
These vary from person to person and this is why it is described as producing an atypical pneumonia.

- Cough present in 75%
- High temperature (over 39°C) in 70%
- Sputum production present in 45%
- Myalgia present in 38%
- Diarrhoea present in 33%
- Headache present in 32%
- Breathlessness
- Fluid in the lung
Can be very ill requiring intensive care and death occurs in 10% of those affected.

**Precautions**
Follow standard principles
- Hand hygiene
- Gloves and apron

**Prevention**
Prevention of legionella bacteria building up in sufficient numbers to cause infection is by ensuring that all showers, baths, sinks and toilets have water flushed through them daily.
Lice (Head)

These are tiny insects which live on the head, most commonly found behind the ears and at the back of the neck. They feed off blood by biting the scalp and each louse lives for about 1 month.

Nits are the eggs which the female louse lays. They are cemented to hairs close to the scalp and can be difficult to see. They hatch after 7 to 10 days and then turn pearly white. As the hair grows, the hatched out nits become more obvious and can be seen further from the scalp. Nits that are a long way from the scalp will have hatched out several weeks ago.

Transmission
They are only spread by head to head contact. Lice cannot fly, hop or jump. They do not willingly leave a head except to walk directly onto another head.

Incubation
7 to 10 days

Infectivity
Until treated.

Treatment
Sprinkle the prescribed lotion onto parted hair and rub gently into the scalp until the whole head is treated. Allow the hair to dry naturally. DO NOT USE A HAIRDRYER OR A DIRECT SOURCE OF HEAT AS THE LOTIONS ARE HIGHLY FLAMMABLE. After 12 hours, shampoo the hair as normal – but allow drying naturally. Two applications are required 7 days apart.

Lice (Body)

Body lice are uncommon in the UK.

Transmission
By direct contact with infected person, but more particularly from infested clothing.

Infectivity
Until treated.

Precautions
Follow Standard Principles. Gloves and plastic apron to be worn by staff in contact with the patient and their clothing.
Treatment of Linen
It is advisable to wash the infested patients clothing and bedding separately – so bag as infected linen. (See Laundry Policy within this document).

Lice (Pubic)

Pubic lice (crabs) can be found on any part of the body, where there is coarse hair, not just in the pubic region.

Transmission
By close contact, direct contact, i.e. usually sexual contact.

Symptoms
Extremely itchy.

Infectivity
Until treated.

Precautions
Follow Standard Principles. Gloves and plastic apron to be worn by staff in contact with patient and their clothing.

Treatment
Apply prescribed insecticidal lotion to all hairy parts of the body, not just to the pubic region, bathe after 12 hours.

Treatment of linen
It is advisable to wash the infected patients clothing and bedding separately, so bag as infected linen. See Laundry Policy within this document.
Meningitis (The Infection Control Meningitis Policy)

Introduction

Meningitis means inflammation of the lining of the brain, (meninges). The two major types of meningitis are, Bacterial Meningitis and Viral Meningitis.

Rationale

Early recognition and prompt action can reduce the effect on the patient and control the spread of the disease and prevent severe disability and death.

Scope of Policy

This applies to all patients and staff of Mersey Care NHS Trust.

Principles

This policy is devised from government legislation and national and professional guidance.

Mersey Care NHS Trust believes that prevention and control of infection is an important part of the overall risk management strategy of the health care environment.

The trust is committed to educating all health care workers to recognise the signs and symptoms of meningitis.

Policy

All NHS Organisations are required to have in place effective systems to prevent hospital acquired infection and to demonstrate that prevention and control of infection is managed to minimise the risk of infection. This policy informs all health care workers of the mode and transmission of meningococcal disease in infected patients.

Legislation and Guidance


Guidelines to be adhered to regarding Meningitis.

Public Health (Control of Disease) Act 1984

State that all notifiable and suspected cases are notified to the “proper officer”, and this is the consultant in Health Protection.

The Health and Safety at Work Act 1974 – see page 21

The Control of Substances Hazardous to Health Regulations 2003 – see page 24

Professional Guidance – see page 25

Duties

(For general overall duties please refer to section 2.1 p28)

The Chief Executive is responsible for ensuring that:

there are effective arrangements including the provision of an Infection Control Team and an Infection Control Committee, and for ensuring direct access for the ICT to appraise of adverse incidents.

the Trust has in place accredited pathology services who will advise on confirmed cases of meningitis.

The Infection Control Team is responsible for reporting adverse events/incidents to the Health Protection Agency, the Infection Control Committee and in the annual report to the Trust board.

The Infection Control Nurse Manager is responsible for the 24 hour on call rota which ensures that expert infection control advice, accessed through Ashworth switchboard.

The Site Manager from Ashworth or Nurse in Charge of any other part of the Trust is responsible for reporting a diagnosed case of Meningitis to the Infection Control Team as soon as a diagnosis has been made.

Epidemiology

Meningococcal disease usually presents as a sporadic case, although localised outbreaks of two or more cases can occur in families, institutions, schools and closed community settings. Three common presentations are:-

- Meningitis
- Septicaemia
A combination of both

**Symptoms**
Meningococcal disease can affect all age groups early symptoms in adults (there are usually a combination of the following symptoms):
- Fever, vomiting, back or joint pains, headache, neck stiffness, photophobia (patient finds looking at a light painful and avoids it), confusion, and a red-purple rash anywhere on the body that does not go pale under pressure.

Late symptoms in adults who are unrousable are, coma, pale and clammy, shock and widespread red/purple rash.

**Transmission**
Air droplet and direct contact, eg kissing.

**Incubation**
7 days

**Infectivity**
It is not an efficient organism for spreading, requires prolonged and fairly close contact.

**Precautions**
Follow Standard Principles. Any staff who carries out resuscitation must use the personal protective equipment provided.

**Reducing Mortality from Meningococcal Disease**
It is paramount that if meningitis is suspected that Medical advice is sought urgently. Rapid admission to hospital is a priority when meningococcal disease is suspected.

**Notification**
As soon as a clinical diagnosis of meningococcal disease is made, the Infection Control Team must be notified, and this can be done through Ashworth Switchboard. The Infection Control Doctor will notify the Consultant in Health Protection.

**Close Contacts**
These are people who sleep under the same roof (i.e. household contacts), in hospitals, patients who share the same dormitory for 10 days prior to onset of symptoms. Other patients or staff who have not
had this type of close contact and have not given mouth to mouth resuscitation to the infected patient do not require antibiotic prophylaxis.

Chemoprophylaxis

This is given to eliminate carriage of meningococci from the network of close contacts and thereby reduce the risk of infection.

Ideally chemoprophylaxis will be given within 24 hours of diagnosis of the index case. In cases of delayed notification prophylaxis should be given for up to 4 weeks from onset. This will be advised by the Infection Control Doctor.

Vaccination

This vaccine is recommended for all 17 to 22 year olds and the responsible Medical Officer must check that vaccination has been carried out.

Process for Monitoring and Compliance – see page 150
Development and Consultation – see page 150
References – see page 150
Bibliography – see page 156
Glossary of Terms – see page 159
Methicillin Resistant Staphylococcus aureus (MRSA) Policy
(also see Staphylococcus aureus)

Introduction

MRSA stands for methicillin-resistant *Staphylococcus aureus*. It is a variety of *Staphylococcus aureus* that is resistant to methicillin (a type of penicillin) and some of the other antibiotics that are usually used to treat *Staphylococcus aureus*.

Staphylococcus aureus is an organism that one third of the population carry on their skin or in their nose without any associated problem. MRSA can enter the body of healthy people without causing infection. It becomes a problem when it enters the bloodstream. MRSA can infect wounds, ulcers, abscesses, catheter entry points and cause inflammation, prevent wounds from healing and can lead to blood poisoning (bacteraemia/ septicaemia).

The paradox around MRSA is that while it is difficult to treat it is not difficult to kill during effective cleaning. Regular monitoring of environmental hygiene standards is essential with particular attention being paid to the bed, mattress, frame, surfaces around the bed and the floors and by rounding the corners between the walls and the floors this makes it easier to clean and to stop a build up of dust at the floor edges.

MRSA is no more dangerous or virulent than other varieties of *Staphylococcus aureus*, but it is much more difficult to treat because the range of antibiotics which are effective against it is reduced.

MRSA is one of the most prevalent micro-organisms involved with healthcare-associated infections. It is usually confined to hospitals and in particular to vulnerable or debilitated patients. These include patients in intensive care units, and on surgical or orthopaedic wards. Some nursing homes have experienced problems with this bacterium. MRSA does not pose a risk to hospital staff (unless they are suffering from a debilitating disease) or family members of an affected patient or their close social or work contacts.

The Code of Practice for Prevention and Control of Healthcare Associated Infections requires all NHS bodies to minimise the risk to patients and targeted screening, decolonisation and effective management through isolation and infection control procedures have been introduced to meet these standards.

Diligent admission screening, isolation and strict infection control procedures are required to prevent cross infection.
Rationale

To minimise mortality and transmission of MRSA, by screening high risk patients and isolating patients who are colonised or infected with MRSA.

Scope of Policy

This policy applies to all staff and patients of Mersey Care NHS Trust.

Principles

This policy is devised from national legislation and guidance.

- Mersey Care NHS Trust believes that the prevention of cross infection can be prevented by staff following standard principles.
- The Trust is committed to reducing the incidence of MRSA and will work to national guidelines and ensure that staff will follow the Infection Control measures that have been put in place through audit.

Policy

All NHS organisations are required to have in place effective systems to prevent and control MRSA, and to demonstrate that prevention and control of infection is part of the overall risk management strategy, and that there is a managed environment which minimises the risk of infection to patients and staff.

Duties

(For general overall duties please refer to section 2.1 p16)

The Chief Executive is responsible for ensuring that effective arrangements are in place for infection control, and that the ICT has direct access to the Chief Executive to appraise of adverse incidents verbally and through the ICC minutes and the Annual Report to the Trust Board, and for the provision of a 24 hour Infection Control Service that is accessed through the trust switchboard.

The Director of Infection Prevention is responsible for reporting MRSA bacteriaemias to the PCT’s, HPA and SHA.

The Service Managers are responsible for ensuring that patients identified in the trusts high risk groups are screened on admission, or readmission following surgical intervention, and for providing isolation facilities to protect other patients from contracting MRSA and for
ensuring that the monthly MRSA data is forwarded to the ICT in a timely manner.

The Infection Control Team is responsible for providing expert advice regarding MRSA, isolation and management of the infection and prevention and control measures to be implemented, this includes whether decolonisation can be implemented.

The Modern Matron and Ward Manager are responsible for ensuring that infection prevention and control measures are implemented to prevent transmission of infection.

The Infection Control Team is responsible for providing infection control training to the ICLN’s and the Ward Manager is responsible for cascading that information to ward staff.

All staff are responsible for working the Infection Prevention and Control Policy.

**Legislation and Guidance – see page 21**

**Professional Guidance – see page 25**

**Infection Control Guidelines**

The majority of people who are colonised with MRSA will not become ill or require antibiotics. People colonised or infected with MRSA do not present a risk to the community at large. Hospital patients who are acutely ill, or who have had major surgery are more vulnerable to infections, and patients with wounds are at risk of cross infection.

The primary objective of infection control is the prevention and spread of infection by patients and staff, and general principles of infection control apply across the Trust.

**Transmission**

Direct spread.

One of the commonest modes of spread is by direct contact, e.g. hands of health care workers. When in contact with a patient colonised or infected with MRSA. The movement of patients with MRSA should be minimised.

**Indirect spread**

By inadequate cleaning of equipment between patients e.g. baths, bedpans, commodes.
Airborne, some patients shed the organism into the immediate environment.

It is not a significant mode of transmission unless the patient is shedding excessive amounts of skin or the standard of cleaning is poor.

**Screening**

Mandatory screening for Methicillin Resistant Staphylococcus aureus (MRSA) in at risk groups of patients was introduced in this trust in October 2006. As far as rooms will allow new admissions to:

- Older Peoples Mental Health Wards- swab nose and any wounds
- Brain Injury Unit- swab nose, throat and wounds
- Admissions of Patients Following Surgery in Acute Trusts- swab surgical site.
- Admission of any patient with a history of MRSA- Swab nose and wounds.

will be nursed in single rooms with en suite facilities whilst being screened for MRSA, whilst being decolonised or whilst infected with MRSA.

**Screening Swabs:**

Should clearly identify the sited swabbed.

Nose
Groin
Wound
Catheter

**Treatment**

Any decolonisation regime should be carried out under the advice and supervision of the Infection Control Team as repeated treatments can lead to resistance.

- **Nasal Carriers**

  Mupirocin ointment 3 times a day for 5 days. Eradication of nasal MRSA is dependent on strict adherence to the treatment regime. It is essential that drug administration and recording is checked to ensure that all 15 treatments have been received. Research has shown that patients whose nasal carriage has not been successfully eradicated did not receive consecutive dosing.

- **Skin Carriers**

  Daily baths/showers with Aquasept. The skin should be moistened and the antiseptic detergent must be applied thoroughly to all areas, paying particular attention to the known carriage sites of axilla, groin
and perineal areas. The hair should also be washed with the antiseptic detergent. Change bedding, clothing and night attire following each day’s decontamination. For patients with eczema, dermatitis or other skin conditions, Oilatum or Oilatum Plus may be used for these patients.

- **Throat Carriers**
  Daily gargles with Betadine and initially combine with nasal treatment. Treatment of throat carriage should only be considered in exceptional circumstances and advice on treatment and duration will be given by the Infection Control Doctor.

- **Infected Wounds**
  Antimicrobial dressings or silver dressings should be used.

- **Infected Catheterised Patients**
  Use Bardex silver alloy coated catheters

**Precautions**
Follow Standard Principles.
Wear gloves and apron.

**Hand Hygiene**
Maintaining high standards of hygiene during hand washing can reduce the risk of cross infection.

**Personal Hygiene**
A good standard of hygiene is to be encouraged with infected patients.

**Medical Devices**
Any instruments or equipment (eg stethoscopes, sphygmomanometers, lifting slings, commodes, wheelchairs, and physiotherapy exercise machines) should be single use and named for MRSA patients for the duration of infectivity. All items to be decontaminated after every use as per Infection Control Decontamination Guidance to prevent re-infection.

**Environmental Hygiene**
Maintaining high standards of environmental hygiene and equipment is essential to reduce the risk of cross infection. Rooms should be kept clutter free and free from dust, as this has proved to be a source of cross infection.

Staphylococcus aureus has been shown to survive in dry conditions for four months, (Duckworth and Jordan, 1990, and Lacey et al 1986).

Rampling et al 2001 found that most of the ward equipment was contaminated with MRSA.
A relationship between cleaning standards and levels of cross infection has been identified.

Spray bed frames, mattresses, surfaces with Virkon, leave for 10 minutes and wipe off.

Clean floors with Virkon (sachet of Virkon to a bucket of water).

There should be a planned annual cleaning programme for every ward which ensures that thorough cleaning of the whole ward occurs, including all bedding, curtains and blinds.

**Risk Assessment**

The site of the organism is very significant in the management of a patient with MRSA, and the measures differ considerably depending on the site colonised or whether an infection has occurred.

**Low Risk**
Patients with intact skin and no invasive devices.

**Intermediate Risk**
Patients with non-intact skin, urinary catheters or other invasive devices.

**High Risk**
Patients who are acutely ill and those who have been admitted to an acute hospital – intensive care, surgical unit, orthopaedic unit, and haematology ward.

Patients returning after surgery with MRSA present in wound site will often completely clear the organism when the wound is healed. If the wound site is infected, the clinician in charge of the patient should contact the Infection Control Doctor / Consultant Medical Microbiologist for advice.

**Re Screening**

To establish clearance of MRSA, three sets of consecutive negative swabs are needed and these must be done 7 days apart.

Swabs following treatment should be taken 2 days after cessation of specific antibiotic/or antiseptic treatment.

**Movement of Patients with MRSA**

Any patient known to be colonised or infected with MRSA that requires to attend for treatment or investigation in another part of the trust or another
trust, the ambulance or transport service must be informed and liaison with the receiving area must occur to ensure that the risk of transmission of infection to others is minimised.

When patients are discharged/ transferred from hospital with MRSA, please notify:-

- The Health Centre (Ashworth only).
- The Infection Control Team.
- The patients GP
- The Ambulance or Transport Service
- Receiving Nursing Home

If re-admission to hospital occurs, please advise:-

- The Infection Control Team
- The Nurse in Charge of Ward
- The Escorting Staff

**Discharge letters**

Must include information regarding the screening, the result and whether decolonisation has been carried out and clearance of MRSA achieved.

**Process for Monitoring and Compliance – see page 150**

**Development and Consultation – see page 150**

**References – see page 150**

**Bibliography – see page 156**

**Glossary of Terms – see page 159**
Mumps

Mumps is an acute viral illness transmitted by direct contact with saliva or droplets from the saliva of an infected person. Humans are the only known host of the mumps virus. Mumps is a notifiable disease.

Symptoms begin with a headache and fever for a day or two before the disease is characterised by swelling of the parotid glands which may be unilateral or bilateral. Complications of symptomatic mumps include oophoritis, orchitis, aseptic meningitis and deafness. Cases may have no salivary gland involvement but develop symptoms elsewhere (orchitis, meningitis). Despite common belief there is no firm evidence that orchitis causes sterility. Other symptoms may include pancreatitis, neuritis, arthritis, mastitis, nephritis, thyroiditis and pericarditis. Mumps was the commonest cause of viral meningitis in children prior to 1988, when vaccine was introduced.

Transmission
By direct contact with saliva.

Incubation
14 to 21 days.

Infectivity
For 5 days prior to parotid swelling and 12 to 25 days after exposure.

Treatment
No specific treatment for mumps, treatment given to alleviate symptoms.

Norovirus (also known as Norwalk virus)

Norovirus is the most common cause of infectious gastroenteritis, which often effects semi closed environments such as hospitals, nursing homes, schools and cruise ships.

Norovirus has multiple genotypes and continually mutates and new genotypes emerge which creates problems for diagnosis.

The reservoir is the gastrointestinal tract of man and person-to-person transmission is by the faecal oral route. There is also a risk of infection from virus in aerosols of projectile vomit. Environmental contamination, especially of toilets; gloves should be used by cleaners. Contaminated food and water, especially bivalve mollusc (e.g. mussels). Infectivity lasts for 48 hours after resolution of symptoms. The infective dose is extremely low.

Transmission
Aerosol spread and direct contact, faecal oral route.

**Incubation**
24 to 48 hours.

**Symptoms**
Sudden onset of projectile vomiting and/or watery diarrhoea, nausea, abdominal cramps, fever or headache. Lasts for 12-60 hours.

**Infectivity**
Highly infectious.

**Diagnosis**
Only specimens of watery diarrhoea to be sent to pathology lab and request for Norovirus testing. Only the earliest specimens obtained contain sufficient virus that is sensitive to testing, and a negative test does not exclude Norovirus infection.

**Precautions**
Follow Standard Principles.
Wear gloves and apron.
Wash hands thoroughly.

**Environmental**
All curtains must be washed/dry and cleaned at the end of the outbreak.
All carpets must be cleaned immediately after an episode of vomiting.

**NB**  See guidelines to be followed for outbreaks of diarrhoea and vomiting, which follows the section on diarrhoea.

**Ringworm**
A fungal skin infection sometimes referred to as ringworm. Typically a scaly, red-shaped ring on the skin. Commonly seen in children, but can also affect adults. Ringworm can be found on the scalp, body, groins, hands, feet and nails.

**Transmission**
From direct contact with infected human or animal.

**Treatment**
Anti fungal cream such as Clotrimazole or Miconazole.

**Prevention of Re-infection**
Treat the source.
Rotavirus

Rotaviruses are the most common viral causes of acute gastroenteritis.

Transmission
Person to person by faecal oral route and by environmental contamination.

Incubation
24 hours.

Symptoms
Abrupt onset of both diarrhoea and vomiting. Moderate to mild fever lasting 48 hours.

Infectivity
Highly infectious whilst vomiting.

Precautions
Follow Standard Principles.
Wear gloves and aprons.
Wash hands thoroughly
Environmental cleaning.

NB Causes outbreaks
See guidelines to be followed for outbreaks of diarrhoea and vomiting which follows the section on diarrhoea.

Salmonella

There are approximately 2,200 different types of salmonella that infect animals and most of these are capable of causing salmonella in human. Poultry is the commonest source of infection.

Infection from salmonella causes nausea, vomiting and fever. Diarrhoea starts after 24 hours and is watery and may become a greenish colour if diarrhoea persists.

Transmission
By ingestion of inadequately cooked food, or food that has been contaminated by a carrier. Also by direct person to person spread by the faecal oral route.

Incubation
18 to 36 hours. Diarrhoea follows within 24 hours.

Infectivity
Until 48 hours after diarrhoea has stopped, but can reactivate. A person can be a carrier.

**Precautions**
Follow Standard Principles. Wear gloves and apron when in contact with any body fluids, and when collecting specimens. Wash hands thoroughly.

**NB Causes outbreaks**
See guidelines to be followed for outbreaks of diarrhoea and vomiting which follows the section on diarrhoea

**Scabies**

There are two types, Classical Scabies and Norwegian (Crusted) Scabies.

Scabies is an allergic irritant resulting from the burrowing of the mite in the skin. Infection occurs following transference of one or more pregnant female mites who burrow into the skin. The infection is spread by direct skin-to-skin contact with another human being. The rash is due to:-

Classical burrows and infection from the mite and normally found in the hands and wrists.

Generalised eczema and itching is an allergic response to the excreta of the mite.

**Transmission**
Infectious by direct skin-to-skin contact, e.g. holding hands, sexual contact. Infectious throughout the 4-6 weeks before the rash develops (itching and rash will develop much more quickly in people who have had scabies before).

**Period of Infectivity**
Throughout the incubation period and until treated with scabicide.

**Treatment**
Apply scabicide cream to the whole of the body including the scalp – but not the face. The cream should be left on for 8 to 24 hours (dependant on the preparation). If hands or other skin areas are washed during the treatment period then cream needs to be re-applied to the areas washed. Re-apply scabicide 7 days later.
Duration

Not infectious from 24 hours after applying the scabicide. The itch may persist for 6-12 weeks and be worse at night. This does not mean that the treatment has not worked. Antihistamines may relieve the itch.

NB   Causes Outbreaks

It is often recommended to treat all close contacts at once whether or not scabies has been diagnosed in all members of the family.

Bedding, clothing and towels pose minimal risk and can be laundered as normal.

Shingles – See Herpes Zoster

Shigella sonnei

This is an acute diarrhoea illness caused by the shigella virus.

Symptoms
Bloody watery diarrhoea/watery diarrhoea. Vomiting, nausea, fever and abdominal pain.

Transmission
Direct contact person to person. Transmission is directly related to exposure to liquid infected stool.

Incubation
12 hours to 7 days, but usually 1 to 3 days.

Infectivity
Whilst organism is present in stools and the bacteria may persist in the gastrointestinal tract for weeks after apparent recovery from infection.

Precautions
Follow Standard Principles.
Apron and gloves when caring for infected person or handling linen, or specimens.
Wash hands thoroughly.

NB   Causes outbreaks

See guidelines to be followed for outbreaks of diarrhoea and vomiting which follows the section on diarrhoea.
Staphylococcus aureus (also see MRSA)

Staphylococcus aureus is a bacterium that lives completely harmlessly on the skin and in the nose of about one third of normal healthy people. Staphylococcus aureus can cause problems when it gets the opportunity to enter the body. This is likely to happen in people who are already unwell.

Staphylococcus aureus causes abscesses, boils, and it can infect wounds - both accidental wounds such as grazes and deliberate wounds such as those made for a drip or during surgery. These are called local infections. It may then spread into the body and cause serious infections such as bacteraemia (blood poisoning). Staphylococcus aureus can also cause food poisoning.

Infections caused by many varieties of Staphylococcus aureus are easily treated with antibiotics such as some types of penicillin and erythromycin.

Panton-Valentine Leukocidin (PVL) Staphylococcus aureus

PVL is a toxic substance produced by some strains of Staphylococcus aureus, which is associated with an increased ability to cause disease.

The incidence of PVL is low and is found in less than 2% of Staphylococcus aureus infections, it is normally associated with cellulitis and pus producing skin infections (abscesses, boils, carbuncles) and very rarely has it led to more invasive infections such as septic arthritis, bacteraemia or necrotising pneumonia (which is life threatening pneumonia).

Prevention of transmission is by good hand hygiene and not sharing personal items such as towels, sponges and bar soap.

PVL can be associated with MRSA, but both can be treated with antibiotics.

Streptococci (group A)

Group A streptococcus (GAS), or Streptococcus pyogenes, is a bacterium that is commonly found on the skin or upper respiratory tract. The term group A refers to the presence of a surface antigen on the bacterium, which helps in the microbiological identification of GAS.

The most common presentation of GAS infection is a mild sore throat (‘strep throat’) or impetigo, a skin infection. However, it can cause more serious infections such as bacteraemia (an infection of the blood), necrotising fasciitis (a severe infection involving death of areas of soft
tissue below the skin), streptococcal toxic shock syndrome (rapidly progressive symptoms with low blood pressure and multi-organ failure) and scarlet fever. Complications of GAS infection can include acute rheumatic fever and post-streptococcal glomerulonephritis (heart and kidney diseases caused by an immune reaction to the bacteria).

**Severe Streptococcal Infections (Necrotising Fasciitis)**

Symptoms are varied but often include:

**Early Symptoms:**
Usually minor trauma or wound which does not appear infected.
Some pain in the general area but not localised to trauma or wound.
Pain is usually disproportionate to the infection or injury and is often described like a pulled muscle.
Flu like symptoms, such as diarrhoea, nausea, fever, confusion, dizziness, weakness and general malaise.
Intense thirst as the body becomes dehydrated.

**Advanced Symptoms:**
The limb or area of the body experiencing pain begins to swell.
The limb/area may show purplish rash.
The limb/area dark marks will appear that will become blisters filled with blackish fluid.
The wound may actually appear necrotic.

**Clinical Symptoms:**
Blood pressure will drop severely.
Unconsciousness will occur.
Tuberculosis Policy (including Multi Drug Resistant TB)

Introduction

Tuberculosis can be controlled by prompt recognition and ensuring that complete treatment of people with the disease occurs, to prevent the growth of drug resistant TB. Tuberculosis is an infection caused by a bacterium of the mycobacterium tuberculosis complex, which may affect any part of the body, but most commonly affects the lungs or lymph nodes.

Once a person is infected, one of the following occurs:
- The infection may heal spontaneously
- Over weeks or months active disease may develop
- The infection may be contained and not apparent at the time but may cause active disease in later life (reactivation), when old age or other events weaken the immunity.

Rationale

Maintain high awareness of TB in healthcare professionals, to minimise mortality and transmission of TB by early diagnosis and effective treatment and by primary prevention and immunisation.

Scope of Policy

This policy applies to all staff and patients of Mersey Care NHS Trust.

Principles

This policy is devised from national legislation, which requires all Trusts to have a TB Policy.

- Mersey Care NHS Trust believes in the prevention of TB by early detection and effective treatment of patients who are sputum positive. Normally these patients will be effectively managed in hospital during periods of infectivity to minimise the risk of infection.
- The Trust is committed to the prevention of TB and offers chemoprophylaxis to those infected, and prevention through immunisation.
- The Trust will work to the UK National Tuberculosis Policy and ensure that Infection Control measures are in place.
Policy

All NHS Organisations are required to have in place, effective systems to prevent and control hospital acquired infections, to demonstrate that prevention and control of infection is part of the overall risk management strategy, and that there is a managed environment which minimises the risk of infection to patients and staff.

Duties

(For general overall duties please refer to section 2.1 p16)

The Chief Executive is responsible for ensuring that:

- effective arrangements are in place for Infection Control, within the Trust and these will include the provision of an appropriately constituted and functional Infection Prevention and Control Team which reports on adverse events/incidents to the Infection Control Committee and in the annual report to the Trust Board.
- the Infection Control Team has direct access to appraise of adverse events/incidents.

The Infection Control Doctor is responsible for informing the Health Protection Agency of any cases of TB. The Infection Control Nurse Manager is responsible for the 24 hour on call rota which ensures that expert infection control advice is provided and accessed through Ashworth Hospitals Switchboard.

The Director of Infection Prevention and Control is responsible for ensuring that the Infection Control Team receives regular up date training to ensure that they can provides expert advice on matters relating to infection control on a day-to-day basis.

The Infection Control Team is responsible for:

liasing with the Occupational Health Department with regard to staff health and transmission of disease.

Clinical staff are responsible for the surveillance of TB in patients received from prison and target screening to high-risk groups.

Clinical staff are responsible for ensuring that patients suspected of TB are referred immediately to the local TB Team, and work to the guidance on the management of TB patients, providing best practice
service delivery, both for newly diagnosed patients and those transferred into our care.

The Infection Control Team are responsible for advising how the patient will be managed (isolation and what precautions PPE- Masks) will be required.

Modern Matrons and Ward Managers are responsible for ensuring that ICT advice is adhered to.

All staff are responsible for adhering to this Policy.

**Legislation and Guidance**


This document provides a framework for local policies.

**Public Health (Control of Disease) Act 1984** and **Public Health (Infectious Disease) Regulations 1988**.

State that all notifiable and suspected cases are notified to the “proper officer”, and this is the Consultant in Health Protection.

**Review of Law on Infectious Disease Control 1989.**

Identifies notifiable diseases and actions to be taken

**The Health and Safety at Work Act 1974 – see page 17**

**Notification of Reporting Diseases to the Health and Safety Executive**

(The Reporting of Injuries, Disease and Dangerous Occurrences Regulations 1995) (RIDDOR).

**Professional Guidance – see page 25**

**Nursing and Midwifery Council (NMC) – see page 25**

**General Medical Council – see page 25**
Infection Control Guidelines

Most patients with tuberculosis can be treated in the Trust, only a minority need admission to hospital, ie patients with sputum positive pulmonary tuberculosis who are infectious to others and must be barrier nursed in a side room for the first two weeks of treatment.

Disposal of infected material (sputum/containers) must be into clinical waste for incineration, and infected sputum on floors or surfaces must be covered with Virkon granules and left for 20 minutes before being brushed up and disposed of into clinical waste.

Clinical Teams must inform the Infection Control Team regarding any patient suspected or confirmed of having tuberculosis.

Use of Masks

There is no clear guidance on the efficacy of face masks preventing the transmission of tuberculosis (Rogers 1981), but staff will be given the choice of wearing personal protective equipment.

The World Health Organisation (WHO) recommends that infectious patients with an uncontrolled cough, who are being transported to other areas of the hospital, must wear a mask as the use of a mask will substantially reduce any aerosol generated by a cough or sneeze (WHO 1993).

The Infection Control Team will advise regarding the use of the different types of masks available.

The Disease

Untreated people with infectious TB of the lungs, infect on average 10-15 people per year. Tuberculosis can not only infect the lungs, but also can cause meningitis and infect the lymph nodes, bones and joints, the pericardium, and organs of the urinary tract and genitals, (Ormerod 1990).

Risk of contracting TB from contact with an infected person.

The risk of a contact acquiring the infection depends on the nature and duration of exposure.

<table>
<thead>
<tr>
<th>Nature of Contact</th>
<th>Risk of Infection</th>
</tr>
</thead>
<tbody>
<tr>
<td>None known</td>
<td>1 in 100,000</td>
</tr>
<tr>
<td>Casual social contact</td>
<td>1 in 100,000</td>
</tr>
<tr>
<td>School, workplace</td>
<td>1 in 50 to 1 in 3</td>
</tr>
</tbody>
</table>
Bar, social club up to 1 in 10
Dormitory 1 in 5
Home 1 in 3
Nursing home 1 in 20

Symptoms
Cough with phlegm which may be blood stained.
Chest pains and shortness of breath.
Loss of appetite and weight.
Fever with night sweats.
Sometimes lumps in the neck or swollen joints.

Transmission
By airborne and aerosol spread from an infectious person.

Incubation
4 to 12 weeks.

Infectivity
Pulmonary TB is infectious for the first 2 weeks of treatment.

Treatment
TB can be completely cured but it involves taking medication for 9 months.

Precautions
Follow Standard Principles.
A vaccine is available to protect against TB (BCG). BCG must never be given to person diagnosed with HIV (IWG 1996).

NB This is a notifiable disease.

Multi-drug Resistant Tuberculosis

Some tuberculosis organisms are resistant to one or more drugs commonly used to treat tuberculosis. Inadequate or incomplete treatment tends to select out these organisms so that the patient’s disease becomes resistant to treatment. The resistant organisms can then be passed on to other people, whose disease will also be resistant to treatment from the start.

Multi-drug resistant tuberculosis is by definition, a tuberculosis which is resistant to two or more of the main anti tuberculosis drugs. The implication is both serious for the person and for the public health because of the limited number of drugs available. These patients must be treated in a negative pressure isolation room available in the Infectious Disease Unit (Royal Liverpool University Hospital), and under the care of a thoracic physician and in liaison with the microbiological services.
TB and HIV

The identification of individuals at high risk of developing tuberculosis is complicated in HIV infection by the loss of response to the tuberculin skin test. Also the diagnosis of tuberculosis is complicated by a typical radiological changes. Close clinical monitoring rather than chemoprophylaxis is therefore recommended.

Compliance with Treatment

Spot checks of compliance (eg pill counts, urine tests, prescription checks should be done as a routine. Supervision of patients who default is recommended.

Non-Compliant Patients

Individual treatment plans for non-compliant patients and those likely to be non-compliant should include directly observed therapy, daily, twice or three times per week.

Compulsory admission is rarely required, but the Consultant in Health Protection and the TB Clinician can legally secure a magistrates order when a person has tuberculosis of the respiratory tract in an infectious state.

Contact Tracing

The incidence of tuberculosis among close contacts is low but sufficient to warrant follow up.

Contact tracing is an integral part of the routine management of patients with TB and should be carried out as per the British Thoracic Society Guidelines. Tracing is limited in the first instance to close contacts (household and close associates).

The Infection Control Nurse will draw up a list of those patients in close proximity to the infected patient and will note if the patient is at increased risk (immunocompromised through disease or therapy).

The Infection Control Doctor or Director of Infection Prevention and Control will advise the Responsible Medical Officer of patients who may be at risk of developing infection so that any unexplained cough, weight loss etc may be investigated without delay.
The Occupational Health Department will advise whether staff have adequate protection against TB. The necessity to carry out further screening will be determined by the Consultant in Health Protection. Members of staff or patients who have had prolonged contact with an infected patient will be treated as a family contact.

Process for Monitoring and Compliance – see page 150
Development and Consultation – see page 150
References – see page 150
Bibliography – see page 156
Glossary of Terms – see page 159
3.15 THE INFECTION CONTROL SURVEILLANCE POLICY

3.15.1 Introduction

All NHS organisations are required to put infection control at the heart of good management and clinical practice, to ensure effective protection of the public's health and to minimise the risk of hospitals acquired infection, (HA1). No risk is more fundamental than the risk of infection, (DOH 2003).

Trusts have had to monitor levels of hospital-acquired infections and compulsory surveillance of methicillin resistant staphylococcus aureus (MRSA) bacteraemias has been carried out since 2001, and of Clostridium difficile associated diarrhoea since 2004.

Infection Control is being given a greater prominence by the government. The Chief Medical Officers guidance “Working Together to reduce Health Care Associated Infection in England” lays down seven action areas, of which action one active surveillance and investigation is to be adhered to. (DOH December 2003).

3.15.2 Rationale

The transmission of infection patient to patient, or to health care workers can have serious consequences, which result in debilitating illness and even death. The cost of hospital-acquired infection is high, and it is estimated that one in ten NHS patients are affected by infection each year, (DOH 2003). For many common infections, early recognition and prompt action can reduce the spread of disease and the severity of the illness.

Surveillance does not just refer to the reporting of organisms or disease, it is the continuing process of data collection, analysis, interpretation and the dissemination of information to enable appropriate action to be taken, (Painter 2003 and Egan 2004). Surveillance has been recognised as a key component of reactive and proactive infection control work and is considered to be the cornerstone of an Infection Control Programme, (Clark 2002).

3.15.3 Scope of Policy

This policy applies to all patients and staff in the Trust.
3.15.4 Principles

This policy is devised from government legislation, and national and professional guidance.

- Mersey Care NHS Trust believes that prevention and control of infection is an important part of the overall risk management strategy of the health care environment, be it hospital or community care.
- There are agreed objectives and priorities for targeted surveillance of infection developed by the Infection Control Team (ICT), and endorsed by the Infection Control Committee (ICC), and the Trust Board.
- There is alert organism and alert condition surveillance targeting in patient and community environments to prevent and rapidly detect outbreaks of infection.
- One day snapshot infection prevalence surveys carried out, as per research guidance on a midweek day. (J.Rossello-Urgell et al 2004).
- Ward based reporting of infections to the ICT.
- GP/RMO reporting of infections to the ICT.
- Monitoring of staff sickness rates in conjunction with Managers and the Occupational Health departments occurs at times of risk, e.g. Influenza.
- There is a procedure for monitoring and reporting untoward events/incidents associated with infection or, that have the potential to produce unwanted effects involving safety of patients and staff or others, via Steiss to the Strategic Health Authority.

Reportable incidents (by the Infection Control Team) are those that: -

- Result in significant morbidity or mortality.
- Involve highly virulent organisms.
- Are readily transmissible.
- Require control measures that have an impact on the care of other patients including limitation of access to health services.

These are: -

- Outbreaks, two or more linked cases of infection in a health care setting.
- Infected health care worker or patient or incidents necessitating look back investigations, (e.g. TB, vCJD and BBV infections).
- There is regular reporting of adverse events to the ICC and annually to the Trust Board, and the minutes of the ICC are sent to the Governance Committee.
• The Microbiology laboratories used by the Trust are CPA approved, and support the Infection Control Team by processing data, surveillance, specialist testing and providing results.

3.15.5 Policy

All NHS organisations are required to have in place effective systems to prevent control and hospitals acquired infection, to demonstrate that prevention and control of infection is part of the overall risk management strategy and that there is a managed environment, which minimises the risk of infection to patients.

3.15.6 Duties
(For general overall duties please refer to section 2.1 p16)

• The Chief Executive is responsible for:
  ensuring that there are effective arrangements for infection control within the Trust and these will include the provision of and appropriately constituted and functioning Infection Prevention and Control Team which reports on adverse incidents, infection data, progress with the Service Plan, Policies, and Annual Report and for direct access of the ICT to appraise of infection control problems.
  that contracts are in place with Approved and Accredited Laboratories for the testing of specimens, and for ensuring that the ICT receive laboratory reports and immediate alert organism notification.
  ensuring that there are effective arrangements for infection control within the Trust, and for ensuring direct access of the ICT to report to the Chief Executive on all aspects of surveillance, prevention and infection control.

• The Director of Infection Prevention and Control is responsible for:
  ensuring that the ICT receive regular update training to ensure that it can provide expert infection control advice.
  ensuring that surveillance is part of annual ICT Service Plan, that this includes reporting of mandatory surveillance of healthcare associated infections and communicable diseases that meet local, regional and national guidance in monitoring, reporting, auditing of alert organisms as well as reporting to the ICC Committee and the Trust Board regularly.

The ICD is responsible for reporting serious outbreaks of infection to the Health Protection Agency.
The Infection Control Nurse Manager is responsible for:
• providing a 24 hour on call rota which provides expert advice and is accessed through Ashworth switchboard.
• planning the collation of surveillance data.
The Infection Control Team is responsible for:
• the reporting of MRSA bacteraemias, Clostridium difficile, and other alert organisms by STEISS to HPA, SHA and PCT’s.

3.15.7 Alert Condition Surveillance

Alert conditions are conditions and organisms that may give rise to hospital outbreaks. The Infection Control Team must be advised of any occurrence of the following conditions at the earliest possible opportunity.

- AIDS
- Cholera
- Dysentery (amoebic/bacillary)
- Herpes
- Measles
- Meningococcal Septicaemia
- Plague
- Pyrexia of unknown origin
- Scabies
- Severe soft tissue infections
- Suspected legionellosis
- Typhoid/paratyphoid fever
- Viral hepatitis
- Chickenpox/Shingles
- Diphtheria
- Food Poisoning
- Influenza
- Meningitis
- Mumps
- Poliomyelitis
- Rubella
- Scarlet fever
- Suspected infective D&V
- Tuberculosis
- Viral haemorrhagic fevers
- Whooping cough

3.15.8 Alert Organism Surveillance

Alert organisms are usually isolated in the laboratory; the laboratory staff are responsible for informing the Infection Control Team.

3.15.9 Transfer into the trust of patients with known infective organisms

Should a patient be transferred in to Mersey Care NHS Trust with a positive diagnosis for any of the following organisms, then the Infection Control Team should be immediately notified:

**Urine**
- Gentamicin resistant gram negative bacilli
- Staphylococcus aureus
- MRSA

**Faeces**
- Salmonella
• Campylobacter
• E-coli
• Cryptosporidium
• Clostridium difficile toxin

Swabs
• MRSA
• Staphylococcus aureus
• Group A streptococcus
• Pseudomonas aeruginosa
• Gentamicin / multi resistant gram negative

Viral Isolates / Positive Antigen Tests
• Herpes zoster
• Parvovirus
• Respiratory viruses
• Rotavirus
• Norovirus

3.15.10 **Notifiable Diseases**
“Notifiable Diseases” is a legal term denoting diseases that must, by law, be reported to the “proper officer,” who is the Consultant in Health Protection.

The Notification of Disease Report book is kept in the Infection Control Department and the Infection Control Nurse ensures that the relevant Consultant signs the documentation.

The following diseases are notifiable:
• acute encephalitis
• cholera
• dysentery (amoebic bacillary)
• leprosy
• malaria
• meningitis
• mumps
• plague
• rabies
• rubella
• smallpox
• tuberculosis
• typhus
• viral hepatitis
• whooping cough
• anthrax
• diphtheria
• food poisoning
• leptospirosis
• measles
• meningococcal septicaemia
• paratyphoid fever
• poliomyelitis
• relapsing fever
• scarlet fever
• tetanus
• typhoid fever
• viral haemorrhagic fever
• yellow fever
Process for Monitoring and Compliance – see page 150
Development and Consultation – see page 150
References – see page 150
Bibliography – see page 156
Glossary of Terms – see page 159
3.16 Isolation Policy

3.16.1 Introduction

Hospital acquired infections impose a significant burden on the NHS, and can cause vulnerable patients, particularly the elderly and the immunocompromised to become very ill and in some cases can cause death.

Isolation is the precaution required to prevent the transmission of organisms responsible for infection and to ensure that the control measures required are implemented to protect other patients, staff and visitors.

Isolation precautions can be applied to an individual case, a patient in a single room, cohorting a number of patients with the same infection in a bay, wing or ward. The system implemented will be dependant on the infection, the number of people infected and the isolation facilities available.

The need for isolation must be regularly reviewed and will only be implemented for the duration of infectivity.

3.16.2 Rationale

To minimise mortality and the transmission of infection by effective isolation and adherence to infection prevention and control measures.

3.16.3 Scope of Policy

This Policy applies to all staff and patients of Mersey care NHS Trust.

3.16.4 Principles

This Policy is devised from government guidance and is required to meet the legislation of the Health Act 2006, The code of Practice for the Prevention and Control of Healthcare Associated infection.

Mersey Care NHS Trust believes in minimising the risk of infection by containing the infection and all staff will adhere to infection prevention and control measures implemented.

Infection risks will be assessed (risk assessment) and managed according to the risk, (risk management) by the Infection Control Team and the Clinical Team.
3.16.5 Policy

All NHS hospitals are required to have in place effective systems to prevent and control hospital acquired infections, to demonstrate that prevention and control of infection is part of the overall Risk Management Strategy and that there is a managed environment which minimises the risk of infection to patients and staff.

3.16.6 Duties

(For general overall duties please refer to section 2.1 p16)

The Chief Executive is responsible for:
- ensuring that there are effective arrangements for infection control within the trust. These arrangements include the provision of an Infection Control Team and an Infection Control Committee. An annual Infection Control Programme is required, supported and approved by the Trust Board.
- ensuring a direct links between the Infection Control Committee and the Governance Committee, and that the ICT have direct access to appraise the Chief Executive of adverse incidents or events.

The Infection Control Nurse Manager is responsible for:
- the on call rota which provides expert advice 24 hours a day.

The Infection Control Team are responsible for:
- management of infection and the prevention and control measures to be implemented.
- collating a list of contacts, if applicable, and will determine the closure of the ward to admissions and transfers.

Modern Matrons and Ward Managers are responsible for:
- ensuring that all staff are aware of and comply with this Policy and the prevention and control measures implemented.

3.16.7 Legislation and Guidance


States that all trusts are to have an Isolation Policy.

The Health and Safety at Work Act 1974- See page 21

Notification on Reporting Diseases to the Health and Safety Executive, The Reporting Injuries, Diseases and Dangerous Occurrences Regulations (1995), (RIDDOR).
3.16.8 Isolation, and Isolation Facilities Required

There are different levels of precautions and isolation required to prevent the spread of infection and these include:

- Contact precautions/isolation.
- Respiratory isolation.
- Strict isolation.

Contact Precautions/Isolation

These are used in situations where the mode of transmission of the infecting organism is via blood to blood contact (e.g. Hepatitis), the faecal-oral route (e.g. viral gastroenteritis and other enteric organisms), or by contact via hands, skin, mucous membranes or wounds (e.g. MRSA).

Isolation Facilities:

- a single room with en-suite facilities.
- a single room with named single person commode.
- A single room next to an identified toilet for sole use of infected patient.

If no single room available every effort must be made to provide a room on the ward including consideration of moving a non-infectious patient to another ward.

An en-suite single room is the preferred choice, but is not always available. For example:

- If a patient has diarrhoea a single room is preferred, but is essential for patients with Clostridium difficile.
- Admission to a single room is recommended for MRSA at risk groups (as far as is available).
- If a patient is known to be colonised with MRSA on the skin a single room is preferred.
- If MRSA is in discharging wounds or the patient has a respiratory tract colonisation a single room is essential.
Respiratory Isolation (e.g T.B, Chickenpox)

Respiratory isolation is to prevent the transmission of infectious diseases over short distances through the air and single room is essential. Serious infections spread by the respiratory route will normally be transferred to Acute NHS Trusts, (exceptions may occur for example during a Pandemic).

Strict Isolation (e.g suspected diphtheria, or viral haemorrhagic fever).

The Infection Control Nurse On Call must be notified immediately via the Ashworth switchboard.

The trust is not equipped to treat some infectious diseases, and arrangements will be made by the ICT with the On Call Consultant in Communicable Diseases and the Infectious Disease Unit for immediate admission of patients with high risk infections.

The ICN will also inform the receiving hospitals ICT of the admission.

Single Room Isolation

Single room isolation is necessary when a patient presents an infection risk to others or the patient is at risk from infection from others (immunocompromised), Ayliffe 2001.

Single room isolation will not, by itself, prevent the transmission of infection, it is part of the isolation procedure and must be used in conjunction with infection control precautions.

The objective of single room isolation is to minimise infection, when there is a risk of airborne infection, the door must be kept closed and only essential staff should enter.

Research has shown that single room isolation may have psychological implications for the patient, (Madeo 2001, and Newton 2001).

Individual patient care needs will be taken into account in the risk assessment and risk management process by the ICT and the Clinical Team, which may increase the risk of spread of infection and will be recorded in the Clinical Notes by the Clinical Team when considering the isolation of a patient with:
• Severe mental illness requiring close observation.
• Patients mental state being contra-indicated to single room isolation.

These patients will need to be managed in limited association with others and nursed on a 1 to 1 with increased decontamination of areas infected with patient contact, which will have resource and financial implications (Wilson 2001).

Cohorting in Bays and Wings

This occurs when a number of patients with the same infection are nursed in a bay or wing and the same principle applies.

Communication

It is essential that everyone is aware of the infection control precautions that have been put in place:

• Explain to the patient and relatives why isolation is required and what infection control precautions are required, whilst maintaining the patients dignity and confidentiality.

• Ensure all staff, both visiting and regular, are made aware of the importance of adhering to infection control precautions.

• Certain outbreaks or infections attract media interest if the clinical area is contacted refer them to the Communication Department.

• Isolation notice to go on single room door. See page.

3.16.9 Infection Control Standard Precautions

Hand Washing

This is the single most effective way to prevent cross infection, and staff must adhere to the trusts Hand Hygiene Policy.

Personal Protective Equipment (PPE)

PPE should be available on a trolley outside of the isolation room, or located as close as possible.

Gloves must be worn to:
Protect the hands from contamination with organic matter and microorganisms.
Reduce the risk of transmission of infection to both staff and patients.
Gloves must be worn when:  
Carrying out invasive procedures, when in contact with sterile sites, non intact skin, mucous membranes and all activities that have been assessed as carrying a risk of exposure to blood, body fluids, secretions, excretions, sharp or contaminated instruments.  
Handling household and clinical waste and laundry.  
Cleaning and using cleaning products (and the NHS Colour Code must be adhered to).

Gloves must be:  
Worn as a single use item. Put gloves on immediately before patient contact or treatment and remove as soon as activity is completed.  
Changed between carrying out different care tasks.  
Disposed of as clinical waste, and hands decontaminated on removal of gloves.

Types of Gloves Provided by the Trust  
See page 51 of the Infection Prevention and Control Policy.

Plastic Aprons  
Are provided for basic protection. They are designed to be single use and must be worn when there is a risk that clothing may be exposed to body fluids, infection or dirty conditions when cleaning, or when handling soiled, foul or infected laundry.

Aprons must be changed after completion of nursing task, between different aspects of patients care, after cleaning each different area and during isolation, or during an outbreak, after cleaning each single room.

Full body water repellent gowns are available and should be worn when there is a risk of extensive splashing of blood, body fluids, secretions or excretions.

Masks  
Must be worn:  
During an outbreak or incident of infection where aerosol contamination is a risk e.g. Influenza, Pandemic Influenza, or if a patient has open and active TB of the Lung and is in the first 14 days of treatment.

When powder cleaning or toxic spray cleaning substances are used.

Eye Protection
Safety glasses are provided to protect from risk of exposure to the eyes from blood, body fluids and some toxic cleaning materials.

**Linen and Clothing**

All contaminated clothing and used linen must be folded carefully to prevent airborne contamination, and placed into red alginate bags and tied off whilst in the infected area and taken on leaving the isolation area straight to the porter collection point.

**Decontamination of Equipment**

Follow guidance of Decontamination Policy in the Infection Prevention and Control Policy.

**Decontamination of the Environment**

Follow Daily and Terminal Cleaning sections in the Infection Prevention and Control Policy.

**Crockery and Cutlery**

No specific precautions are required. Wash as normal in dishwasher.

**Movement of Infectious Patients**

This should be avoided, wherever possible investigations are to be undertaken in the isolation room.

If unavoidable and clinical need determines it is necessary then prior arrangements must be made and the level of contact with other people minimised, eg attend for last appointment.

Porters and ambulance staff must be given prior notice and decontamination of chairs/ trolleys to occur following transportation.

**Process for Monitoring and Compliance – see page 150**
**Development and Consultation – see page 150**
**References – see page 150**
**Bibliography – see page 156**
**Glossary of Terms – see page 159**

**Isolation Notice Overleaf**
ISOLATION

Please report to Nurse in Charge before entering this room.

Thank you for your cooperation

Infection Control Team
3.17 THE INFECTION CONTROL MAJOR OUTBREAK POLICY

3.17.1 Introduction - Rationale

Hospital Infection Control is an important part of effective risk management to improve the quality of patient care and the Occupational health of the staff (DOH EL(93)11).

Each incident of infection is different and requires specific measures to deal with the individual circumstances, although certain basic arrangements will be applicable to all outbreaks of infection.

3.17.2 Scope of Policy

This Policy applies to all patients and staff.

3.17.3 Principles

This policy is devised from government legislation, and national and professional guidance.

- Mersey Care NHS Trust believes that prevention and control of infection is an important part of the overall risk management strategy of the health care environment, be it hospital or community care.
- The Trust is committed to minimising the risk of cross infection and re-infection from contamination of hands, environment, equipment or medical devices; and to providing hand hygiene products, protective clothing and equipment necessary to protect both patients and staff.
- There are agreed objectives and priorities for targeted surveillance of infection developed by the Infection Control Committee (ICC) and the Trust board.
- There is a procedure for monitoring and reporting untoward events/incidents associated with infection or that have the potential to produce unwanted effects involving safety of patients, staff or others.
- There is direct access for reporting of immediate infection control adverse events/incidents through the Director of Infection Prevention and Control and the Infection Control Doctor to the Chief Executive.
- There is a regular reporting of adverse events/incidents to the Infection Control Committee Meetings and annually to the Trust board.

3.17.4 Duties
(For general overall duties please refer to section 2.1 p16)

The Chief Executive is responsible for ensuring:
that there are effective arrangements for infection prevention and control within the trust and these will include the provision of an appropriately constituted and functioning Infection Prevention and Control Team which reports on adverse incidents, infection data, progress with the service plan, policies and annual report to an Infection Control Committee (ICC); The Trust Board receives the Infection Control Committee minutes, and supports and approves the ICT Service Plan and Annual Report.

- direct links from the ICT and the Infection Control Committee with the Governance Committee to ensure compliance with the Health Act 2006, Code of Practice for the Prevention and Control of Healthcare Associated Infection, guidance and best practice, and for ensuring that contracts are in place with Approved and Accredited Laboratories.

- The Director of Infection Prevention and Control is responsible for the continuing education of the ICT to ensure the provision of up to date expert advice relating to infection control information an appropriate management of infection and infected patients.

- The Infection Control Doctor is responsible for reporting serious outbreaks of infections to the Consultant in Health Protection and for Chairing the Outbreak Committee.

- The Infection Control Nurse Manager is responsible for the provision of a 24 hour on call service which provides expert advice and is accessed through Ashworth Hospital switchboard.

- The Infection Control Team is responsible for providing expert guidance on how the outbreak will be managed.

- The Service Managers will ensure that ICT guidance is adhered to which may include closure of wards to admissions and transfers.

- All staff are responsible for adhering to this Policy.

3.17.5 Legislation

In 1988 the Department of Health and Social Security and the Public Health Laboratory Service produced the guidance “Hospital Infection Control” which gave the management arrangements required to control infection and to manage outbreaks in both hospital and community settings.

This work was reviewed and the current Hospital Infection Control guidance was issued in 1995 by the Department of Health and the Public Health Laboratory Service, and this document is used in formulating this policy (DOH & PHLS 1995).

In addition to the need to prevent avoidable infections, there are legal duties to protect the patients, staff and visitors from harm:
The Health and Safety at Work Act 1974 – see page 21

The Control of Substances Hazardous to Health Regulations 2003 – see page 24

The Food Safety Act 1990 – see page 22

Professional Guidance – see page 25

3.17.6 Identification of Outbreaks

A major outbreak can be defined as involving more than 20 people in total (patients or staff or both) or a smaller number when control measures are appearing to be ineffective. The main difference in management is the formal committee structure which is automatically set in place when a major outbreak is declared. In practice the same principles of good hygiene and cohorting of infected patients apply. The likely types of infections which may cause outbreaks within the trust are respiratory tract infections including pneumonia and gastroenteritis.

Major Outbreak

is assessed by :-

• The number of people involved.
• Type of organism.
• Potential and mode of spread.

Requirements to recognise a major outbreak.

It is important to rapidly recognise an outbreak and this is achieved by :-

• Surveillance.
• Prompt notification of infectious disease.
• Vigilance of medical and nursing staff.

When a member of staff notes two or more patients or staff with the same symptoms then that staff member should inform the Infection Control Nurse as soon as possible.

Types of Outbreak

Two main types of outbreaks:-

• Acute outbreaks i.e. which lead to sudden increase of number of people with symptoms.
• Non acute outbreak i.e. which develop over a number of days or weeks.

Action
Close collaboration and co-operation of multidisciplinary Staff is necessary during an outbreak, guidance issued by the Infection Control Team must be followed to effectively control and manage the outbreak.

- Admissions, Transfers, and discharge may well be affected.
- Intervention must take place to halt spread.

**Infections – Further Information**

The likely cause of outbreaks of infections are respiratory tract infections or gastroenteritis.

The following symptoms should alert staff to the possibility of such a diagnosis:

**Respiratory Tract Infection**

Upper Respiratory Tract Infection :-
Sore throat / pain on swallowing/pyrexia/ headaches/ listlessness.

Upper Respiratory tract Infection :-
Headache/pyrexia/breathlessness/rapid breathing/patient often very ill.

**Gastroenteritis**

Vomiting (may be blood stained) and/or abdominal pain/ or diarrhoea and pyrexia.

**Please note:**
Two or more cases in patients or staff on one ward or area must be reported to the Infection Control Nurse

Further details of those affected will be requested i.e date of onset of symptoms etc.

**3.17.7 Procedure To Be Followed On Specific Outbreaks**

- to be adhered to by Managers/Heads of Departments/Nurse in Charge.

**A. Outbreak of diarrhoea and vomiting**

- Report cases in patients and staff to the nurse in charge and the Infection Control Nurse.
- Closure of ward to new admissions may be recommended by the ICT.
- Inter-ward transfer and discharge is not usually advised.
- Restrict staff entering the ward to only those who genuinely need to be there.
- Patients should be encouraged to recover in their own rooms.
- Patients should bathe or shower daily.
• Bed linen, towels and night attire should be changed as soon as soiled and at least every day to prevent re-infection.
• Linen should be put into red linen bags.
• Bedrooms and en-suite area to be cleaned daily.
• **Hand hygiene is paramount, all staff must wash their hands thoroughly after contact with patient and linen.**
• All crockery and cutlery **must** be washed in the dishwasher.
• Ensure that sick patients have their TPR recorded twice daily.
• Patients with diarrhoea should have samples obtained and sent for Noroviruses and C&S.
• Incident log number will be issued by the Infection Control Nurse and this is to be written on all lab forms.
• **Do not give Immodium until a specimen has been obtained, and please note that Immodium is contraindicated if Clostridium difficile is suspected.**
• Staff attending to patients confined to bed, when handling samples, or when cleaning up body fluid spillages will wear disposable gloves and aprons.
• Ensure that extra fluids are available to prevent dehydration, but do not give fruit juice as this may cause further diarrhoea.
• Encourage thorough patient hand washing after using the toilet.
• Ensure that there is an adequate supply of sample pots, bedpans, clinical waste bags/bins, Virkon, disposable gloves and aprons, toilet paper, bed linen, towels, soap and red linen bags.
• **Body fluid spillages must be covered immediately with sufficient Virkon to completely cover the spillage, leave for 10mins and then brush up and dispose into clinical waste. Wash the brush and dustpan in hot soapy water rinse and stand up to dry.**
• Staff who arrive on duty or become unwell with diarrhoea and vomiting **MUST GO HOME,** and remain off duty for 48 hours after the last episode of vomiting or diarrhoea. If diarrhoea persists for more than 24 hours please contact the Occupational Health Department for a sample pot.
• Please report any further cases of staff or patients with diarrhoea or vomiting to the Infection Control Nurse, and in the case of an outbreak a member of the Infection Control Team will contact the ward/dept, on a daily basis.
• **Please note that in the event of an outbreak of diarrhoea and vomiting the Control Team may give guidance regarding staff not being allowed to work in a non infected area for 48 hours following completion of a shift in an infected ward/dept.**
B. **Outbreak of Respiratory Infection**

Procedure to be followed for respiratory infections.

- Report cases of patients and staff with respiratory infections to the nurse in charge and the Infection Control Team.
- Closure of the ward to new admissions may be recommended by the ICT.
- Inter-ward transfers and discharge is not usually advised.
- Restrict staff entering the ward to only those who genuinely need to be there.
- Patients should be encouraged to recover in their own rooms/bays.
- Patients should bathe or shower daily.
- Bed linen, towels and night attire should be changed as soon as soiled and at least every day to prevent re-infection.
- Dirty linen should be put in red linen bags.
- Bedrooms, en-suites and toilets are to be cleaned daily.
- Hand hygiene is paramount, and all staff must wash their hands thoroughly after contact with patient, linen, and collection of sputum samples/disposal of sputum containers.
- All crockery and cutlery **must** be washed in the dishwasher.
- Ensure that sick patients have their TPR's recorded twice daily.
- Sputum containers must be provided for patients who are expectorating.
- Sputum samples must be sent off for culture and sensitivity.
- Chest x-ray may be advised to diagnose pneumonia/tuberculosis.
- Incident log number will be issued if required by the Infection Control Team, and this is to be written on all laboratory forms.
- Staff attending to patients confined to bed, when handling specimens, cleaning up body fluid spillages or changing bed linen, will wear disposable gloves and aprons.
- Ensure that extra fluids and nourishing drinks are available to prevent dehydration.
- Ensure that there is an adequate supply of sample pots, disposable gloves, aprons, bed linen, towels, soap, red linen bags, and Virkon.
- Staff who arrive on duty ill or become unwell at work **MUST GO HOME** and remain off duty for the duration of the illness.
- Surveillance for and reporting of any further cases to the Infection Control Team and taking action to prevent further spread of infection to staff and patients is paramount in slowing the outbreak.

**NB In the event of a Pandemic Influenza Outbreak staff will be informed to follow the Mersey Care NHS Trust Pandemic Contingency Plan.**

Preventing outbreaks depends on prompt recognition of cases and taking action to prevent further spread to staff and patients.
3.17.8 Declaration of a Medical Emergency

An Outbreak Control Team (OCT) will be convened by the Infection Control Doctor and Chairman of the Mersey Care Infection Control Committee.

The team will consist of:-
Infection Control Doctor
Medical Director/Deputy Chief Executive
Infection Control Nurses
Consultant in Health Protection
Executive Director of Nursing
Nurse Manager of the Unit concerned
Occupational Health Manager
Director of Estates & Facilities
Consultant Psychiatrist of Ward/Unit
Pharmacist
Communications Manager
Secretarial Support
Other People are co-opted by the chairman as required (see agenda)

Role Of The Outbreak Team

Infection Control Doctor
- Declare an outbreak and inform CHPA, CDSC, and Chief Executive
- Chair the OCT meetings.
- Head the Epidemiology Investigation.

Infection Control Nurse Manager
- Provide professional advice to OCT
- Collate information and assist with epidemiological investigations.
- Provide infection control advice to health professionals and others.
- Ensure that infection control measures are working.

Medical Director / Deputy Chief Executive
- Make available an outbreak meeting room.
- Ensure secretarial assistance is available to OCT.
- Liaise with the Infection Control Team.

Executive Director of Nursing and Social Care/ Director of Infection Prevention and Control
- Ensure adequate additional resources are available, including staff.

Occupational Health Manager
- Provide professional Occupational Health advice to OCT.
• Collate information and assist with epidemiological investigations.

**Director of Facilities**
• Provide 7 day a week domestic service.
• Provide extra cleaning supplies as required.
• Provide extra portering services as required.
• Ensure extra provision of linen and towels etc are delivered.

**Pharmacist**
• Provide advice on pharmaceutical products (antimicrobial, vaccines etc.)
• Liaise with manufacturers or local pharmacies to obtain supplies speedily and as appropriate.
• Prepare information on indications, contra-indications and cross reactions.
• Ensure the administration of pharmaceutical preparations is undertaken in accordance with patient’s group directives.
• Ensure proper documentation of administration of pharmaceutical preparations and reporting of adverse reactions.

**Communications Manager**
• Provide advice on media issues to OCT.
• Be point contact for press enquiries for the outbreak investigation.
• Be responsible for media strategy.
• Produce press statement based on advice of OCT.

**Secretarial Support**
• Arrange meetings of the OCT and notify OCT members of date, time and venue.
• Produce minutes of the OCT meetings, verify with ICD and circulate minutes.
• Provide secretarial support/office to OCT
• Provide handouts as required.

**3.17.9 Outbreak Control Team Agenda**

**Checklist:**
• Case definition.
• Confirmation and extent of the outbreak.
• Coordinate all arrangements for the investigation of source and cause of outbreak.
• Reports from Infection Control Nurse and Occupational Health Manager.
• Clinical control - assessment of outbreak.
• Co-option to team.
• Take all necessary steps for the continuing care of patients during the outbreak.
• Further assistance requirements - assess need for additional resources.
• Information to relatives and media.
• Provide clear instruction for staff.
• Information for the Chief Executive.
• Specimens to be collected and sent to the Microbiology department.
• The ICD will inform the Microbiology Laboratory of any potential major outbreak and keep them updated.
• Any decision to seek the advice of the Communicable Disease Surveillance Centre would be made within the Outbreak Control Team.
• Certificate of Notification of Infectious Disease will be completed if applicable.
• Meet as frequently as is necessary in the circumstances of the particular infection outbreak and keep minutes of the meetings.
• Define the end of the outbreak.

3.17.10 Report

At the end of the outbreak a report will be written by the Infection Control Doctor for the Chief Executive.
WARD CLOSURE

- Close ward to new admissions.
- Restrict inter-ward transfer/discharge of service users.
- Restrict inter-ward staff/service users movements.
- Restrict staff entering wards, only staff genuinely needing to be there.
- Before entering/leaving ward, staff/service users/relatives must wash hands with alcohol gel. **HAND HYGIENE IS PARAMOUNT.**

- Staff who arrive on duty with diarrhoea and vomiting or become unwell with D&V **MUST GO HOME**, and remain at home until 48 hours free of symptoms. Report to Line Manager via phone.

- Relatives/visitors should be contacted by the ward and advised re infection and visiting.

**ANY FURTHER QUERIES, PLEASE CONTACT INFECTION CONTROL TEAM AT ASHWORTH HOSPITAL ON 0151 471 2635**
Process for Monitoring and Compliance – see page 150
Development and Consultation – see page 150
References – see page 150
Bibliography – see page 156
Glossary of Terms – see page 159
3.18 THE INFECTION CONTROL PANDEMIC INFLuenza GUIDANCE.

Due to the changing nature of this section of the policy, The current pandemic influenza guidance is contained in the Mersey Care NHS Trust Influenza Pandemic Contingency plan which is available on the trust website.

3.19 THE INFECTION CONTROL BLOOD BORNE VIRUS POLICY HIV, HEPATITIS B AND C.

Introduction

Human Immunodeficiency Virus (HIV), Hepatitis B (HBV) and Hepatitis C (HCV) are all blood borne viruses. This means that they can be transmitted by blood transfusion or via blood contaminated (dirty) needles or by direct inoculation of blood as a non - accidental injury (violence eg deliberate bite). The other mode of transmission is via sexual intercourse, these viruses are also present in semen and saliva, (DOH 2000).

Although HIV has been isolated in tears, urine, cerebrospinal, synovial and amniotic fluids these have not been implicated in the transmission of infection. Neither is HIV spread by close social contact with infected people.

The outcome of infection depends on the particular virus: in the case of HIV progression to AIDS - Acquired Immune Deficiency Syndrome is likely. Hepatitis B and C infections may clear up completely (resolution) or lead to a chronic carrier state with possible progression to cirrhosis of the liver.

Prevention of the transmission of blood borne viruses is achieved by using sterile needles and syringes and avoiding unsafe sexual practices.

Rationale

The transmission of blood borne viruses, patient-to-patient, or patient to health care workers can have serious consequences not only for the person infected but also for the trust because of health and safety legislation. In spite of guidance and education, many health care workers continue to be exposed to blood borne viruses from needle stick and sharp injuries and mucosal exposure, (Evans et al 2001).

Research indicates that the prevalence of infection is increased in drug misusers and residents of long term institutions, and that certain occupational groups have a higher risk of infection, (Rowland 1990), (Van
Damme et al 1995) and (DOH 1996). Hepatitis B is a preventable disease and the Department of Health recommends that staff at risk should be vaccinated. This Trust encourages both staff and patients to be immunised against Hepatitis B, (HSC 1998/063).

Scope of Policy

This policy applies to all patients and staff in the Trust.

Legislation and Guidance

In addition to the need to reduce the risk of infection there are legal duties to protect the patients, staff and visitors from harm;- 

The Health and Safety at Work Act 1974 – see page 21

The Control of Substances Hazardous to Health Regulations 2003 – see page 24

HIV Post-Exposure Prophylaxis: Guidance from the Chief Medical Officers Expert Group on AIDS

This guidance is to be applied to health care workers who are occupationally exposed to material which is known to be, or has the potential to be, a source of HIV infection.

North West Communicable Disease and Environment Group - Hepatitis C Policy

This Policy is for the management, control and prevention of Hepatitis C, which is an important public health problem as large numbers of people are affected who continue to harbour the virus and many will go on to develop chronic liver disease.

Principles

This policy is devised from government legislation, national and professional guidance and best practice.

• Mersey Care NHS Trust believes that prevention and control of infection is part of the overall risk management strategy of the health care environment, be it hospital or community care.
• The Occupational Health Departments are proactive in providing immunisation to protect staff from disease and they also provide post exposure prophylaxis advice.
• The Clinical staff offer immunisation to patients to protect them from Hepatitis B and provide counselling and post exposure prophylaxis advice.
• It is also advice that a risk assessment is carried out on admission and screening is carried out as appropriate.

Policy

All NHS organisations are required to put infection control and basic hygiene at the heart of good management and clinical practice to ensure effective protection of health, with particular regard to the prevention of hospital acquired infection, by the provision of safety needles/syringes and devices to prevent sharps injuries.

Duties

(For general overall duties please refer to section 2.1. p16)
N.B. For individual roles and responsibilities following an inoculation injury see section – ‘First Aid’ following potential exposure to blood or body fluids page 148

The Service Managers are responsible for ensuring that:
• all trust staff, including agency, locum, contractors and volunteers attend corporate Induction and Mandatory Infection Control Training sessions, specially arranged Infection Control Training for services and that all clinical areas have an ICLN who attends training has time to provided cascade hand hygiene training and the audit of hand hygiene compliance.
• only safety Devices are purchased,

Modern Matrons and Ward Managers are responsible for ensuring:
• that only safety devices are used.
• all staff employed by the Trust must receive Infection Control Induction and Mandatory Training.
• All staff are responsible for complying with the Trusts Infection Control Policies and for attending training sessions rostered to attend.

The Infection Control Nurses are responsible for:
• Following up individual inoculation injuries and monitoring incidents
• carrying out the annual programme for the audit of Infection Control Policies and Procedures, including the safe use and disposal of sharps, clinical waste and the containment and decontamination of blood spillages.

Professional Duties and Responsibilities

To ensure that the policy is effectively implemented, staff must work to their professional guidance – see page 25
Infection Control Guidelines

Key Points to Minimise Infection

Follow Standard Principles.

All patients potentially present a risk of infection. Therefore, consider all blood and body fluids to be infectious. Take your time. Avoid spillages of blood or body fluids.

Effective hand washing is the single most important factor in preventing infection. Use the soap provided, wash all areas of the hands, rinse thoroughly and dry with paper towels. Cover cuts and abrasions with waterproof dressings.

Exercise great care with all sharps to prevent puncture wounds, cuts or abrasions. Protect existing wounds, skin rashes or lesions, conjunctivae and mucosal surfaces from all blood and body fluids. When the use of sharps is essential, exercise particular care in handling and disposal of same. Only use approved sharps containers. Never put needles or other sharps into clinical or household waste bags. Never re-sheath needles.

Control surface contamination by blood or body fluids by containment and disinfection. Wearing a plastic apron and disposable gloves sprinkle Virkon granules onto the spillage. Leave for 10 minutes. Remove soiled granules with care using a dustpan and brush, and put into a yellow clinical waste bag or bin. Tag it and then place in the porters lock for collection, or place into clinical waste container for collection by local services. Then wash the dustpan and brush in hot soapy water, rinse and stand up to dry.

NB Failure to dispose of clinical waste and sharps safely will be a breach of these regulations and could result in prosecution.

Occupational Risk

The risk of transmission of blood borne viruses is greater from patient to health care worker than from health care worker to patient.

Occupational risks of transmission of blood borne viruses arise from the possible exposure to blood or other body fluids or tissues contaminated with blood from an infected patient. Semen and breast milk may pose a risk of infection but exposure to these body fluids is rare in most health care settings.
Many exposures result from a failure to follow Infection Control guidelines regarding the safe handling and disposal of sharps. Even when infection control guidelines and safe working practices are adopted there is still the possibility of accidents and malicious acts resulting in exposure to blood borne viruses.

Most cases of occupationally acquired HIV infection have arisen from percutaneous exposure to HIV infected materials, and of these the majority have followed injury from hollow needles in association with a needle or canula being placed in a vein, eg venepuncture others have arisen through exposure of mucous membranes or non intact skin to blood.

Transmission of blood borne viruses may result from contamination of mucous membranes of the eyes or mouth, or of broken skin, with infected blood or other infectious material, and by human bites if the skin is broken.

There is no evidence of blood borne viruses being transmitted by contamination of intact skin, by inhalation or by faecal - oral contamination.

Please Note:
Not all patients with blood borne viruses have had their infections diagnosed. Therefore it is important that all blood and body fluids and tissues are regarded as potentially infectious, and health care workers should follow Standard Principles scrupulously and in all circumstances to avoid contact with them.

Human Immunodeficiency Virus (HIV)

HIV is a retrovirus. It is unique in that it can produce a special chemical an enzyme called reverse transcriptase, which allows the HIV to join with the most important chemicals in the nucleus of the cells it attacks so that the virus can actually become part of the cell structure.

HIV is a lentivirus. It can act very slowly in the body, so the effect of HIV in the body may take months or even years to show up. Someone infected with HIV may not show any signs of the virus for years and be unaware that they are infected - but they will still be carriers of the infection and able to pass the infection on to others. Because of this dormant period it is impossible to say how many people are infected with HIV.

Normally when we have an infection our bodies have the ability to fight off and establish resistance to the infectious process. HIV is not only an infection of the body, it is an infection of the immune system. The body is unable to fight off the disease and results in the manifestations of AIDS.
Keeping healthy and living positively with HIV can increase the time between infection and symptom development.

The disease progresses as follows:-

• HIV infection
  After the initial infection with HIV an acute flu like illness may occur, and often the infected person is unaware of being unwell.

• HIV infection - asymptomatic
  In this stage, which may last from 6 months to 10 years the infected person often has no observable signs or symptoms of infection.

• AIDS Related Conditions (ARC)
  This covers the various illnesses caused by the virus that do not fall into the strict definition of AIDS. eg serious weight loss, night sweats, pre-senile dementia.

• Acquired Immune Deficiency Syndrome
  AIDS is the case defined condition of an HIV infected person who develops one of a number of opportunistic infections that are associated with the syndrome. eg Pneumonia, salmonella infections, thrush, Kaposi’s sarcoma.

Please note:
Staff as well as patients may be HIV positive and that to be truly safe Standard Principles must be followed at all times.

In the last 20 years, 4 NHS staff have died from HIV Virus and a further 9 have been infected after being injured by needles used on HIV patients. (Safety Practitioner 2003).

The risk of acquiring HIV infection following a needle stick injury or a bite is small.

Although HIV transmission may occur in health care settings most transmission occurs:–

• by unprotected penetrative sexual intercourse with an infected person (between men or between man and woman).

• by inoculation of infected blood. At present in the UK this results mainly from drug mis-users sharing blood contaminated injecting equipment.

• from an infected mother to her baby before or during birth or through breast-feeding.

There is no vaccine to prevent HIV.

Hepatitis B Virus (HBV)

Hepatitis means inflammation of the liver. Viruses are the commonest cause but drugs and alcohol can also disturb the body’s immune system.
Since the 1960s many hepatitis viruses have been identified and all cause similar acute illness but the differences are in long-term effect.

World-wide hepatitis B virus is the most common cause of liver disease and more than 2 million people die from it each year.

Hepatitis B is transmitted in the same way as HIV but it is far more infectious. Hepatitis B infection can vary from having no noticeable symptoms to mild flu like symptoms, nausea, vomiting, fever, jaundice, hepatic failure coma and death within 8 weeks. Hepatitis B virus may be found in blood and virtually all body fluids of patients with Hepatitis B and carriers of the virus, but blood semen and vaginal fluids are the source of spread of HBV infection. Transmission usually occurs by:-

- unprotected sexual intercourse.
- injecting drug mis-users sharing contaminated injecting equipment.
- from an infected mother to her baby before or during birth or through breast feeding.
- needle stick injuries.
- sharing of infected needles.

90 to 95% of adults who are infected with the Hepatitis B Virus will fully recover. 5 to 10% will become long term carriers. If the infection is acquired at birth, the majority of these children will become long term carriers. A small number of chronic carriers may go on to develop chronic active Hepatitis, cirrhosis or liver cancer.

Hepatitis B is a major concern for health care staff who are exposed to blood and body fluids.

The most important measure that health care workers can take is to be vaccinated against HBV.

Hepatitis C Virus (HCV)

Hepatitis C was first identified in 1989, and it has emerged as a significant public health problem. There are an estimated 170 million carriers of HCV world wide, and it is estimated that 200,000 people in England may be chronic carriers and the majority of these are unaware of their infection, (DH 2002).

Hepatitis C is an unusual hepatitis virus as 90% of infected people do not show any symptoms when first infected. About 10% of infected people will develop acute jaundice and others will develop cirrhosis between 20 and 40 years after the initial infection. A small proportion of these people will eventually develop liver cancer.
HCV is most frequently acquired by direct blood to blood contact, and the commonest mode of transmission in the UK is by sharing blood contaminated injecting equipment by injecting drug misusers. Both sexual and perinatal transmission can occur, though rarely. In the past transmission has occurred through transfusion of contaminated blood and organ transplant, but testing of blood donors and all products for HCV antibodies and heat treatment of blood products has greatly reduced transmission in this way, (PHLS 1999).

Hepatitis C Virus is a small enveloped single stranded RNA Virus. The nucleotide sequence of the HCV genome (the genotype) is variable. Different genotypes have distinct geographical distributions and response to treatment.

**HCV Genotypes**

To date, there are 6 genotypes and more than 100 sub-types.
- Type 1a – UK, Europe, USA, Japan
- Type 1b – UK, Europe, USA, Japan
- Type 2a – UK, Japan, China
- Type 2b – UK, Japan, China
- Type 3 – UK, Scandinavian Countries
- Type 4 – Middle East, Africa
- Type 5 – Canada, South Africa
- Type 6 – Hong Kong, Maco

In the UK, 66% of Hepatitis C infections are genotype 1 and the rest are predominately 2 and 3.

Genotyping is essential as it helps with the decision of treatment and the duration of treatment. Genotype 1 is more resistant to treatment than 2 and 3 and a longer duration of therapy is required.

The Chief Medical Officer highlighted Hepatitis C in his infectious disease strategy “Getting Ahead of the Curve”, and in the DH Hepatitis C Action Plan for England in 2004. The main proposal is to increase diagnosis of people at current or past risk of HCV infection and to assess and offer treatment. This strategy targets Prisons and Health Care settings. (DH 2003).

Hepatitis C – Who should be offered a HCV test?
- anyone with:
  - Past or current drug history or injecting, drug use, irrespective of how long ago or how frequent that usage was.
• Babies of HCV infected mothers
• Regular sexual partners of known HCV patients
• Needle stick injury from known or likely HCV infected source
• Attendees of renal dialysis units (past and present)
• Medical/Dental treatment abroad
• Tattoos or piercing abroad, in poor infection control premises.

There is no vaccine for Hepatitis C virus.

**Hepatitis C Tests and their Meaning**

Hepatitis C antibody test ELISA/RIBA
This test shows if there has been any previous exposure to HCV. The virus is not usually detected in the first 3 months from exposure.

**HCV RNA (PCR)**

This test must be done to establish infectivity.
HCV RNA Positive – means current chronic infection
HCV RNA Negative – means recovered from infections and this happens in 15 to 20% of cases.

**Liver Investigations**

When HCV RNA positive result is received, the patient should have the following test done before being referred to a hepatologist or infectious disease consultant:-
• Liver enzymes
• Albumen
• Clotting
• Bilirubin
• Alpha fetoprotein
• Liver ultrasound
• HCV genotyping

Then arrange appointment with consultant who will arrange for a liver biopsy, (if required), and a decision will be made regarding treatment.

**Aims of Antiviral Treatment**

• To suppress viral replication
• To reduce liver inflammation
• To prevent development of liver fibrosis
• To prevent cirrhosis and liver cancer
• To eradicate Hepatitis C
Safe Handling and Disposal of Sharps


Employers and employees are accountable through the Health and Safety at Work Act 1974 to ensure that the workplace is free from hazard. Any staff using or handling sharps has a duty under the Health and Safety at Work Act 1974 to work safely and dispose of sharps items correctly into the sharps boxes provided. Every ward and department that may handle sharps items including broken blood stained crockery and glass, must request the provision of sharps boxes from the Domestic Supervisor and follow these guidelines.

Many needlestick injuries are preventable.
- all employees must use safety devices when giving injections or for taking blood.
- click the safety guard into place or ensure that the needle has retracted.
- place all disposable sharps into sharps containers immediately after use.
- needles must never be re-sheathed.
- discard disposable syringes and needles as a single unit into the sharps container, needle pointing downwards.
- discard blood stained broken crockery/glass and razor blades etc., into a sharps container.
- sharps containers must be puncture resistant, suitable for incineration and conform to British Standards 7320.
- sharps containers must be ordered to provide a ready supply.
- sharps containers must only be two thirds full. The lid must then be secured, tagged to identify the ward / area, hospital and date of disposal, and put out for collection by the porters.

NB Please read the Health and Safety Policy on Clinical Waste.

Venepuncture

All our patients are considered to be in the high-risk category so all staff must wear gloves when in contact with any body fluid.

Gloves cannot prevent needle stick injury but they may reduce the risk of acquiring a blood borne virus. Punctured gloves allow blood to contaminate the hand but also reduces the volume of blood to which the hand is exposed.
Single use gloves must be provided and they should conform to the requirements of European Standard 455.

Taking a blood sample from a patient for analysis the following guidelines must be followed:-

- Take the sharps box and equipment to the patient, position the sharps box no more than arms length away.
- A calm, amenable patient is ideal. If this is not the case **DO NOT PROCEED.** Refer to the Consultant or Medical staff who has made the request for advice.
- Explain the procedure to the patient.
- Clean the skin with a mediswab.
- Take the specimen required.
- Dispose of the needle, syringe and vacutainer sheath immediately into the sharps box. **NEVER fill the sharps container to more than two thirds full.**
- Label specimens, complete the lab request form details.
- Put hazard stickers on if applicable. (**To be used when patients are diagnosed or suspected to have a blood borne virus**).
- Place specimen and lab request form into plastic lab pocket.
- Place specimen into transportation box.

**NB** Do not leave sharps materials or the sharps box unattended. Any person using or handling sharps has a duty under the Health and Safety at Work Act 1974 to work safely and to dispose of sharps items correctly into the sharps boxes provided, and ensure that the workplace is free from hazard.

**Personal Protective Equipment- see page 50**

**Clinical Waste – see page 46**

**Gloves – see page 50**

**Types of Gloves – see page 51**

**Plastic Aprons – see page 52**

**Masks – see page 51**

**Eye Protection – see page 52**
Coveralls – see page 52

Contaminated Linen – see page 43

All items of clothing or linen contaminated with blood or body fluids should be handled with caution. Wearing gloves the staff must put hospital linen into a red polythene bag secure and place inside a red linen bag.

The Department of Health’s guidance Hospital Laundry Arrangements For Used and Infected Linen - annex one must be followed:-
• items should be washed with detergent using the hot wash cycle to a temperature of 71 degrees C for a minimum of ten minutes.
• Infected linen must be placed in a red coloured water soluble bag which is to be transferred to the washer without opening.
• dry cleaning must be done at elevated temperatures.
• or incinerated.
• washing machines must not be overloaded.

Decontamination of Spillages and Equipment – see page 34

Large Blood Spillages, Dried Blood and Faecal Smearing (Dirty Protests) – see page 38

Specimens and Transportation – see page 52

Accidental Exposure

Many occupational exposures occur through failure to follow recommended procedures and from careless disposal of sharps and clinical waste. There will however remain occasions when infection control guidelines and safe working practices have been followed that accidents and malicious acts will occur.

Accidental exposure is identified as:-
• percutaneous injury - from needles, instruments, etc. which are contaminated with blood or body fluids.
• exposure of broken skin - abrasions, cuts, eczema, etc. which has come into contact with blood or body fluids.
• exposure of mucous membranes - eyes, mouth to blood or body fluids.
• Bites - puncture wounds inflicted by an individual known or suspected to have a blood borne virus.

NB Please read the Infection Control Post Exposure Prophylaxis Policy For Staff Occupationally Exposed To Blood Borne Viruses.
First Aid – Following Potential Exposure to Blood or Body Fluids

Any staff performing first aid has a duty under the Health and Safety at Work Act 1974 to work safely, use the first aid equipment provided and follow Standard Principles.

Treat all blood as potentially dangerous and remember anyone can be infected with HIV, Hepatitis B and C Virus and anyone can be involved in an accident.

Immediate First Aid for sharps, bites and scratches:-
- Encourage the wound to bleed. Do not suck or scrub the wound
- Wash the wound with soap and water
- Apply a waterproof dressing
- Report the incident to the manager and complete an adverse incident report form
- As soon as possible, attend your Occupational Health Department. If the injury occurs out of hours attend the nearest accident and emergency department for advice or treatment.
- If an injury has occurred from a known HIV, Hepatitis B or C patient, go immediately to the nearest accident and emergency and inform both Occupational Health and Infection Control Department.

Mucous Membrane Exposure (Eyes)
- Rinse thoroughly with water or saline.
- Report the incident to the manager and complete an adverse incident report form
- Report to your Occupational Health Department as soon as possible

Patient Care for known carriers of HIV/HBV/HCV
- No special toilet or bathing precautions are necessary except if the patient has diarrhoea when a separate toilet is recommended.
- Crockery and cutlery should be washed as normal in the dishwasher.
- Gloves must be worn when giving first aid, removing or changing wound dressings, and handling dirty laundry.
- Masks must be used when resuscitating patients.
- Patients should not share toothbrushes, razors, or nail scissors/clippers.
- Ear and body piercing and tattooing should be discouraged.
Death of a Patient with HIV/HBV or HBC

When the Police or Coroner give permission for the body to be moved, only heavily soiled areas of the body should be washed, and then placed into a body bag and marked to alert mortuary staff regarding the risk of infection, (CDSC 1999).

HIV/HCV testing

Anybody who is to be tested for HIV or HCV should have the opportunity of pre and post test counselling. The aim of the counselling is to explain and discuss the implications and limitations of the test so that the person can make an informed decision.

BBV – Donor Testing Protocol

The patient’s Responsible Medical Officer will consider whether it is in the patient’s best interest to be asked to be tested for a third person, this is to protect the patient who may be disadvantaged by being tested.

If the patient declines testing or is mentally incapacitated, then no further action occurs.

Process for Monitoring and Compliance – see page 150
Development and Consultation – see page 150
References – see page 150
Bibliography – see page 156
Glossary of Terms – see page 159
3.20 **Further Advice and Support**

If you have any questions or queries, you can contact the following people:

- Infection Control Nurses on 0151 471 2635. Contact out of hours through the Duty Manager and Ashworth Switchboard.
- Infection Control Doctor/Consultant Medical Microbiologist on 0151 529 4900, or out of hours via Ashworth Hospital Switchboard.

3.21 **Other Trust Policies**

Policy and Procedure for the Management and Decontamination of Medical Devices.

Waste Management Policy.

Policy for the Prevention and Control of Legionella Bacteria in Water Services.

Health and Safety Policy

Occupational Health and Welfare Policy.

4. **Process for Monitoring Compliance and Effectiveness**

The policy author will report to the Clinical Governance Committee on the compliance of this policy and its effectiveness annually. In addition, the Trust Secretary will assess compliance in relation to the requirements for the population of the External Assurance Register annually and report the findings to the Audit Committee.

5. **Development and Consultation**

This policy was written by members of the Infection Control Team and distributed to members of the Infection Control Committee for Consultation along with a selection of key individuals in the Trust.

6. **References**

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7. **Glossary of Terms**

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome.</td>
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<td>BBV's</td>
<td>Blood Borne Viruses.</td>
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<td>BMA</td>
<td>British Medical Association.</td>
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<td>CAUTI's</td>
<td>Catheter Associated Urinary Tract Infections</td>
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<td>CCDC</td>
<td>Consultant in Communicable Disease Society.</td>
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<td>CDSC</td>
<td>Communicable Disease Surveillance Centre.</td>
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<td>CDR</td>
<td>Communicable Disease Report.</td>
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<td>CDT</td>
<td>Clostridium difficile Toxin.</td>
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<td>CJD</td>
<td>Creutzfeldt – Jakob Disease.</td>
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<td>C&amp;S</td>
<td>Culture and Sensitivity.</td>
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<td>COSHH</td>
<td>Control of Substances Hazardous to Health.</td>
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<tr>
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<td>Food Safety Act.</td>
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<td>GDC</td>
<td>General Medical Council.</td>
</tr>
<tr>
<td>GMC</td>
<td>General Medical Council.</td>
</tr>
<tr>
<td>GP</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>HAI</td>
<td>Hospital Acquired Infection.</td>
</tr>
<tr>
<td>HASAW</td>
<td>Health &amp; Safety at Work.</td>
</tr>
<tr>
<td>HAV</td>
<td>Hepatitis A Virus.</td>
</tr>
<tr>
<td>HCAI</td>
<td>Healthcare Associated Infection</td>
</tr>
<tr>
<td>HBV</td>
<td>Hepatitis B Virus.</td>
</tr>
<tr>
<td>HCC</td>
<td>Healthcare Commission</td>
</tr>
<tr>
<td>HCV</td>
<td>Hepatitis C Virus.</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus.</td>
</tr>
<tr>
<td>HMSO</td>
<td>Her Majesties Stationary Office.</td>
</tr>
<tr>
<td>HPA</td>
<td>Health Protection Agency.</td>
</tr>
<tr>
<td>HSC</td>
<td>Health and Safety Commission.</td>
</tr>
<tr>
<td>HSG</td>
<td>Health and Safety Guidelines.</td>
</tr>
<tr>
<td>HSE</td>
<td>Health and Safety Executive.</td>
</tr>
<tr>
<td>ICD</td>
<td>Infection Control Doctor.</td>
</tr>
<tr>
<td>ICC</td>
<td>Infection Control Committee.</td>
</tr>
<tr>
<td>ICLN</td>
<td>Infection Control Link Nurse.</td>
</tr>
<tr>
<td>ICN</td>
<td>Infection Control Nurse.</td>
</tr>
<tr>
<td>ICNA</td>
<td>Infection Control Nurses Association.</td>
</tr>
<tr>
<td>ICT</td>
<td>Infection Control Team.</td>
</tr>
<tr>
<td>JCVI</td>
<td>Joint Committee on Vaccination and Immunisation.</td>
</tr>
<tr>
<td>LRF</td>
<td>Local Resilence Forum</td>
</tr>
<tr>
<td>MDA</td>
<td>Medical Devices Agency.</td>
</tr>
<tr>
<td>MRSA</td>
<td>Methicillin Resistant Staphylococcus Aureus.</td>
</tr>
<tr>
<td>NHS</td>
<td>National Health Service.</td>
</tr>
</tbody>
</table>
OCT  Outbreak Control Team
PCR  Polymerase Chain Reaction.
PPE  Personal Protective Equipment
PHLS Public Health Laboratory Service.
PVL  Panton-Valentine Leukocidin-Positive
RMO Responsible Medical Officer
RRF  Regional Resilience Forum
RNA  Ribonucleic Acid.
TB   Tuberculosis.
UTI's Urinary Tract Infections
vCJD Variant Creutzfeldt Jakob Disease.
TPR  Temperature Pulse Respiration.
WHO World Health Organisation.
POLICY IMPLEMENTATION PLAN

Infection Prevention and Control Policy

<table>
<thead>
<tr>
<th>POLICY NO</th>
<th>IC01</th>
</tr>
</thead>
<tbody>
<tr>
<td>RATIFYING COMMITTEE</td>
<td>Mersey Care Trust Board</td>
</tr>
<tr>
<td>DATE RATIFIED</td>
<td></td>
</tr>
<tr>
<td>NEXT REVIEW DATE</td>
<td>February 2012</td>
</tr>
</tbody>
</table>

ACCOUNTABLE DIRECTOR:-- Executive Director of Nursing/Director of Infection Prevention and Control
Karen Wilson

POLICY AUTHOR:-- Infection Control Doctor/Consultant Medical Microbiologist
Dr M M Rothburn
<table>
<thead>
<tr>
<th>Issues identified / Action to be taken</th>
<th>Time-Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Co-ordination of Implementation</strong></td>
<td></td>
</tr>
<tr>
<td>The Executive Director of Nursing/Director of Infection Prevention and Control will arrange for the policy to be distributed Trust wide via Directorate Managers.</td>
<td>1 Week</td>
</tr>
<tr>
<td><strong>Encouraging Staff</strong></td>
<td></td>
</tr>
<tr>
<td>This policy is applicable to patients and staff.</td>
<td></td>
</tr>
<tr>
<td><strong>Involving Service Users and Carers</strong></td>
<td></td>
</tr>
<tr>
<td>All staff should be aware of where this policy can be found.</td>
<td>All staff should sign a form when they have read the Policy. 4 Weeks</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td></td>
</tr>
<tr>
<td>This policy is in line with the Health Act 2006, Code of Practice for the Prevention and Control of Healthcare Associated Infection. Standards for Better Health, CNST requirements and government guidance.</td>
<td></td>
</tr>
<tr>
<td><strong>Key Policy Issues:</strong></td>
<td></td>
</tr>
<tr>
<td>• Transmission of infection.</td>
<td></td>
</tr>
<tr>
<td>• Decontamination of hands – Hand Hygiene Policy.</td>
<td></td>
</tr>
<tr>
<td>• Decontamination of the Environment, Cleaning, Body Fluid Spillages, Laundry and Clinical Waste.</td>
<td></td>
</tr>
<tr>
<td>• Standard Principles for the use of Personal Protective Equipment.</td>
<td></td>
</tr>
<tr>
<td>• Infectious Diseases A-Z including Clostridium difficile, Meningitis, MRSA and TB Policies.</td>
<td></td>
</tr>
<tr>
<td>• Isolation Policy</td>
<td></td>
</tr>
</tbody>
</table>
- Surveillance Policy.
- Major Outbreak Policy/Management of Outbreak.
- Blood Borne Virus Policy (HIV, Hepatitis B and Hepatitis C).
- Safe Use and Disposal of Sharps.

<table>
<thead>
<tr>
<th>Training</th>
<th>ICLN’s are required to attend 4 mandatory training sessions a year, and Managers are expected to facilitate the cascade training following attendance at the sessions for the rest of the staff group.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources</td>
<td>No significant resource implications has been associated with this policy</td>
</tr>
<tr>
<td>Securing and Sustaining Change</td>
<td>Managers must keep a record that staff have signed that they have read this policy and know where it can be accessed. Managers must ensure that any staff who are off sick or on annual leave when this policy is distributed will read and sign that they have read the policy on their return to work. Managers will keep a record of staff signatures. Managers will identify an Infection Control Link Nurse for their ward or department. There will be clear identification of Infection Control Link Nurses across the trust and this information will be held by the Infection Control Team.</td>
</tr>
<tr>
<td>Evaluating</td>
<td>The Infection Control Team</td>
</tr>
</tbody>
</table>
have drawn up an audit tool with the audit department which will audit compliance to aspects of the policy. Audit will be carried out by the Infection Control Team.

<table>
<thead>
<tr>
<th></th>
<th>24 Months</th>
</tr>
</thead>
</table>

## Appendix 2

### Training Needs Analysis for Infection Prevention and Control

<table>
<thead>
<tr>
<th>Personnel Groups</th>
<th>Type of Training</th>
<th>Training Provider</th>
<th>Frequency &amp; Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Staff, Including Permanent, Locum and Bank</td>
<td>Hand Hygiene and Blood Borne Virus Training, IPC Policy, Website</td>
<td>Mersey Care NHS Trust Infection Control Nurses</td>
<td>Induction 30 minutes</td>
</tr>
<tr>
<td>All Staff, Including Permanent, Locum and Bank</td>
<td>Mandatory – Including Hand Hygiene, BBV, Clinical Waste, Laundry, Cleaning, PPE, Policies, HCAI</td>
<td>Mersey Care NHS Trust Infection Control Nurses</td>
<td>Mandatory – 3 Yearly 1 Hour</td>
</tr>
</tbody>
</table>
| Infection Prevention and Control Link Nurse /Practitioner | Role of the Link Nurse/Practitioner  
Cascade Hand Hygiene Training  
Mandatory Link Professionals Training | Mersey Care NHS Trust Infection Control Nurses  
Mersey Care NHS Trust Infection Control Team. and outside speakers | On appointment to role 30 minutes 3 Monthly Half day |
<p>| Medical Staff  | Hand Hygiene, Antibiotic prescribing, Microbiology, Chain of Infection, BBV, Sharps, PPE, Policy &amp; Website. | E-Learning Package, via computer network. | Induction 30 minutes |</p>
<table>
<thead>
<tr>
<th>Role</th>
<th>Training Content</th>
<th>Infection Control Nurses</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestics</td>
<td>Hand Hygiene, Daily and Terminal Cleaning, Colour Coding, Care of equipment, PPE, Cleaning product usage, HCAI</td>
<td>Mersey Care NHS Trust Infection Control Nurses</td>
<td>Annually</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 Hour</td>
</tr>
<tr>
<td>Porters</td>
<td>Hand Hygiene, PPE, Sharps &amp; Clinical waste.</td>
<td>Mersey Care NHS Trust Infection Control Nurses</td>
<td>Bi-Annually</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30 minutes</td>
</tr>
<tr>
<td>Drivers</td>
<td>Hand Hygiene, PPE, Transport of Specimens, Body Fluid Spillages</td>
<td>Mersey Care NHS Trust Infection Control Nurses</td>
<td>Bi-Annually</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30 minutes</td>
</tr>
<tr>
<td>Contractors</td>
<td>Hand Hygiene, BBVs, Spillages, PPE, HCAI</td>
<td>Mersey Care NHS Trust Infection Control Nurses</td>
<td>Induction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30 minutes</td>
</tr>
</tbody>
</table>