1.0 INTRODUCTION
Chronic haemodialysis patients are at high risk of infection because the process of HD requires long term vascular access. Such patients are susceptible to person – person transmission of infectious agents, directly or indirectly, via contaminated devices, equipment & supplies, environmental surfaces or personnel. Infection control is therefore of paramount importance necessitating screening and isolation protocols for dialysis patients.

2.0 AIM / PURPOSE
The aim of this policy is to give all staff who work at SaTH affiliated units clear instruction on the management of patients with a known/potential infection or BBV including patients returning from holiday abroad.

3.0 OBJECTIVES
To ensure prompt detection , screening and prevention of the spread of BBV’s within the dialysis population.

4.0 DEFINITIONS USED
BBV – Blood borne virus.
BBV screen ( Hepatitis B, Hepatitis C & HIV )
DAFB – Dialysis away from base
HCV – Hepatitis C virus,HBV - Hepatitis B virus
HIV - Human immunodeficiency virus.
CDIFF – Clostridium difficile
ESBL – Extended Spectrum Beta-Lactamase
MRSA – methicillin resistant staph aureus
5.0 SPECIFIC DETAIL

a) **In centre / home haemodialysis patients (Includes inpatients)**
These patients should be screened for BBV’s 3 monthly, MSSA screen 3 monthly and MRSA screen monthly.

b) **Unknown patients**
New acutes / unplanned starters. New dialysis patient BBV screen and MRSA /MSSA screen to be taken. Machine to be isolated for “named patient use only” until BBV result available.

c) **Holiday patients :**

- **Patients coming to any Sath renal units for holiday dialysis**
BBV screen, MRSA screen, FBC, U&E’s & LFT’s to be taken within 28 days of holiday start date and results received by us within 2 weeks or prior to patients arrival.
All patients must be rescreened for nasal MRSA on their first session.
We are able to accept MRSA positive patients as long as they have commenced treatment prior to coming and they are allocated a side room for dialysis.

- **Patients dialysing away from SATH** – these patients will have all screening as requested by holiday unit. This is usually BBV screen, MRSA screen, Pre & post U&E’s, LFT’s and FBC. These are taken within 28 days of holiday start date and paperwork sent to holiday unit 2 weeks prior to holiday. All patients to be given information leaflet on the risks of having Haemodialysis abroad prior to arranging to arranging their holiday.

*See Appendix 2*

**On return depending on their holiday destination:-**

- **Low risk -European countries, UK, Canada, Australia, New Zealand and Japan**- BBV screen and MRSA screen on return and as per routine screening thereafter.

- **Intermediate risk - Rest of the world e.g. South East Asia, South America, Middle east**
Treat as high risk. Screen for HBV / HCV (Test HCV/PCR) on return and every 2 weeks for 3 months. Only include HIV if risk warrants. Segregate patient and Isolate machine for 3 months. MRSA screening on return.

- **High risk – Indian sub continent and parts of Africa**
As above
See also appendix 1

**WE DO NOT ACCEPT HBV POSITIVE PATIENTS.**
a) **Treating a patient who has tested positive for a BBV**

- A single room and isolation for dialysis – separate from the main unit is the optimum choice.

- Whenever possible, designated staff should care for only BBV infected or uninfected during one shift (Good Practice).

- Carriers of Hepatitis B should be dialysed in separate rooms (outside of the main unit) on dedicated machines named for that patients use only. Side rooms should be deep cleaned after use. Cleaning team can be paged during normal hours, housekeepers can do this once trained to do so.

- Carriers of Hepatitis C and HIV positive patients should ideally be dialysed in a side room, although RA guidelines indicate it is not essential to isolate these patients. Dialysis machine to be isolated and used on a “named patient use only” for these patients also.

- Any blood or body fluid spills should be cleaned in accordance with the SaTH Infection Control Trust Policy.

- All staff must wear disposable gloves, aprons, goggles or visor for all clinical procedures.

- All staff must aim to prevent cross infection by adhering strictly to universal precautions and infection control guidelines in the usual way including frequent hand washing.

- All blood lines, dialysers and disposables should be placed in yellow bags & double bagged in another yellow bag. They are then disposed of into the yellow bin. All renal waste in yellow bags is incinerated.

- All blood forms of infected patients must be labelled with “Danger of Infection” labels. Samples to be teletracked for porter to collect. **DO NOT POD HIGH RISK SAMPLES.**

- No special precaution is needed with cutlery and trays.

- All machines named and records to be kept of the machine name for each patient each session for audit purposes.
OTHER INFECTIONS – CDIFF, ESBL, MRSA

- All staff to follow SATH Trust IPC hospital policies.
- Patients requiring isolation to be allocated a side room where possible.
- Dialysis folder to be kept outside the door and red or yellow card placed outside the room to ward other staff. Smaller card to be placed in front of patients dialysis folder indicating infection & necessary precautions.
- Ensure transfer form filled in from ward so renal staff are made aware of any positive results for infections present in renal inpatients.
- MRSA – nasal positive patients do not need to be isolated
- MRSA positive in wounds – patient will require isolation where possible.
- Side rooms should be deep cleaned after use. Cleaning team can be paged during normal hours, housekeepers can also do this once trained.
- Any blood or body fluid spills should be cleaned in accordance with the SaTH Infection Control Trust Policy.

6.0 TRAINING
All staff to be aware of correct screening procedure.
To be covered in staff training packs.
All staff to be shown how to locate unit policies.
All staff to attend infection control updates
All staff to wear PPE in the clinical area

7.0 AUDIT
Routine 3 monthly BBV screening of all dialysis patients.
Routine monthly MRSA & 3 monthly MSSA screening of all dialysis patients

8.0 REFERENCES
Dept of health guidelines – Good practice guidelines for Renal Dialysis / Transplant units. Oct 2010
Renal Association guidelines 2009

9.0 CONTRIBUTION LIST
Dr S Davies – Lead Renal Consultant
N Stockdale – Renal Matron
O Le-Maitre – Renal Unit Manager
P Williams - Renal education and training lead
Algorithm for blood-borne virus (BBV) testing following dialysis away from base (DAFB)

<table>
<thead>
<tr>
<th>Low risk countries (e.g. UK, Europe, US, Canada, Australia, New Zealand and Japan)</th>
<th>Rest of the world (Intermediate risk e.g. South East Asia, South America, Middle East)</th>
<th>High risk countries (e.g. Indian sub-continent, parts of Africa)</th>
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</thead>
<tbody>
<tr>
<td>Continue regular testing for HBV/HCV in line with DH guidance for UK units, i.e. testing for HBsAg and HCV Ab every three months; testing for HIV if indicated by a risk assessment.</td>
<td>Treat as high risk</td>
<td>Test for HBV/HCV on return (the test for HCV should be a sensitive combined HCV Ab/Ag or HCV pcr). Screen for HBV/HCV on return and at the end of three months. Only include HIV (Ag/Ab or HIV pcr) if risk assessment merits. <strong>Segregate patient and isolate dialysis machine for three months.</strong></td>
</tr>
<tr>
<td>Patient does not require segregation when dialysing.</td>
<td>Treat as high risk</td>
<td><strong>Screen for HBV/HCV on return and after 3 months of isolation before permitted return to the general unit. Only include HIV if risk assessment merits.</strong></td>
</tr>
<tr>
<td>Review transplant status and agree on case-by-case basis on requirement for suspension from transplant list.</td>
<td>Treat as high risk</td>
<td>Patients who dialyse in high risk units should be suspended from the transplant list for <strong>three</strong> months and only reactivated when the three-month virology screening results are negative.</td>
</tr>
</tbody>
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1. Local risk assessment may indicate that some European countries may be regarded as intermediate risk.