The Trust Hand Hygiene Policy should be read in conjunction

Guidelines for hand decontamination (excluding aseptic procedures)

Healthcare acquired infection (HAI) is a major concern in the NHS and efforts to reduce its incidence have been highlighted as a key initiative (Pellowe et al 2004). The prevention of HAI is imperative in the Neonatal Intensive Care Unit (NICU) because of the vulnerable patient group with an inadequately developed or compromised immune system. Furthermore neonates receiving intensive care have an increased sensitivity to infections which are often due to low grade pathogens such as coagulase-negative staphylococcus (CONS) (Yoxall et al 1996).

Compromising infection control barriers may save time in the short term but may lead to an increase in HAI with unnecessary suffering, increased morbidity, mortality, costs and work load in the long term (Pratt et al 2001).


Hand decontamination is a vital factor in preventing HAI. Hands are recognised as the main vectors of cross infection and evidence shows effective hand decontamination can reduce the incidence of HAI (Bryan et al 1995, Gould et al 1996).

Decontamination refers to the process of the physical removal of body fluids, organic matter and transient micro-organisms from the hands i.e. hand washing and/or the destruction of micro-organisms i.e. hand antisepsis (Pratt et al 2001).

Hands must be decontaminated before each and every episode of direct patient contact and after any activity or contact that potentially results in hands becoming contaminated. (Hand Decontamination and the Use of Gloves ASPH NHS Trust 2006).

The method of decontamination of hands will depend upon the level of contamination. Alcohol hand rub or gel is only effective in the absence of hand soiling. Its aim is to remove transient organisms picked up on the caregiver’s hands or to reduce their numbers before they are transferred to another patient or piece of equipment. Grossly contaminated hands have a high micro-organism load, alcohol hand rub or gel will be ineffective so hands must be washed with liquid soap and water and dried thoroughly. (Pratt et al 2001)

When you move from cot to cot, handling charts etc, gel your hands!

If you examine a baby, wash and gel your hands!
<table>
<thead>
<tr>
<th>Action</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff must remove all jewellery including stoned rings, watches and</td>
<td>Allows effective hand washing</td>
</tr>
<tr>
<td>bracelets. Wedding rings may be worn but must be free of stones and</td>
<td>Protects the integrity of the neonate’s skin</td>
</tr>
<tr>
<td>ridges</td>
<td></td>
</tr>
<tr>
<td>Staff must keep their fingernails short, clean, free from nail polish</td>
<td>Allows effective hand washing</td>
</tr>
<tr>
<td>and no false nails may be worn</td>
<td>Protects the integrity of the neonate’s skin</td>
</tr>
<tr>
<td>Sleeves must be rolled up above the elbows</td>
<td>Allows effective hand and forearm washing</td>
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<tr>
<td></td>
<td>Protects contamination of sleeves</td>
</tr>
<tr>
<td>On entry to the nursery all staff and visitors must wash their hands</td>
<td>Hand washing is the most important method of the prevention of cross</td>
</tr>
<tr>
<td>and forearms</td>
<td>infection by the contact route. Aims to remove transient organisms located</td>
</tr>
<tr>
<td></td>
<td>on the surface of the skin</td>
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<tr>
<td>Cuts and abrasions on the hands and forearms must be covered with a</td>
<td>Small abrasions or lesions may provide entry points for pathogenic</td>
</tr>
<tr>
<td>waterproof dressing without visible air holes.</td>
<td>organisms. This can be prevented by wearing gloves</td>
</tr>
<tr>
<td>Ensure adequate supply of liquid soap and paper towels</td>
<td>To allow effective hand washing and drying</td>
</tr>
<tr>
<td>1. Turn on water to suitable temperature by use of sensor or elbow</td>
<td>Water which is too hot may damage skin</td>
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<tr>
<td>operated taps</td>
<td>To prevent hypersensitivity to the detergent being used</td>
</tr>
<tr>
<td>Wet hands and forearms to elbows with running water</td>
<td></td>
</tr>
<tr>
<td>Apply liquid soap to hands and lather up to elbows if indicated</td>
<td></td>
</tr>
<tr>
<td>2. Thoroughly lather all hand and forearm surfaces for 10-15 seconds</td>
<td>Inadequate hand washing often misses some of these areas.</td>
</tr>
<tr>
<td>paying particular attention to nails, finger pads, thumbs, between</td>
<td></td>
</tr>
<tr>
<td>fingers and wedding rings</td>
<td></td>
</tr>
<tr>
<td>3. Rinse hands and forearms thoroughly under running water to remove</td>
<td>Deposits of soap can cause irritation or soreness</td>
</tr>
<tr>
<td>all traces of soap</td>
<td></td>
</tr>
<tr>
<td>4. Turn off water by use of sensor without touching it or by elbow</td>
<td>Prevents re-contamination of clean hands</td>
</tr>
<tr>
<td>taps</td>
<td></td>
</tr>
<tr>
<td>5. Dry hands thoroughly on paper towels</td>
<td>Hands that are not completely dry may still retain some transient</td>
</tr>
<tr>
<td>Hands are now socially clean and dry</td>
<td>bacteria. Micro-organisms transfer more quickly between wet than dry</td>
</tr>
<tr>
<td></td>
<td>surfaces</td>
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<tr>
<td></td>
<td>Effective drying will rub away remaining transient bacteria and friction</td>
</tr>
<tr>
<td></td>
<td>involved may remove some resident bacteria.</td>
</tr>
<tr>
<td>6. Dispose of paper towels in clinical waste bin by foot lever</td>
<td>Prevents re-contamination of clean hands</td>
</tr>
<tr>
<td>7. Alcohol gel must be used at the</td>
<td>To decontaminate hands and forearms to elbows</td>
</tr>
<tr>
<td>Step</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1.</td>
<td>Incubator or cot side before approaching every baby</td>
</tr>
<tr>
<td>2.</td>
<td>Assign carer</td>
</tr>
<tr>
<td>3.</td>
<td>Wash hands thoroughly using warm soapy water</td>
</tr>
<tr>
<td>4.</td>
<td>Rinse hands thoroughly</td>
</tr>
<tr>
<td>5.</td>
<td>Dry hands thoroughly</td>
</tr>
<tr>
<td>6.</td>
<td>Alcohol gel 3-4 pumps into the palm of hands</td>
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<tr>
<td>7.</td>
<td>Apply to all surfaces up to elbows paying attention to nails, finger pads, thumbs and between fingers</td>
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<tr>
<td>8.</td>
<td>Rub for 30 seconds until dry</td>
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<tr>
<td>9.</td>
<td>After completion of care/procedure and between all patients repeat steps 1-10</td>
</tr>
<tr>
<td>10.</td>
<td>Dispense recommended amount of alcohol gel</td>
</tr>
<tr>
<td>11.</td>
<td>Gloves play a major part in preventing cross infection and reducing H.A.I and as per Universal Precautions ASPH NHS Trust</td>
</tr>
<tr>
<td>12.</td>
<td>Wipe hands thoroughly</td>
</tr>
<tr>
<td>13.</td>
<td>Rub for 30 seconds until dry</td>
</tr>
<tr>
<td>14.</td>
<td>Hand care of health care givers essential</td>
</tr>
<tr>
<td>15.</td>
<td>Holes may develop in gloves whilst in use and hands may be contaminated during removal. Use of gloves may cause increase in release of resident micro-organisms due to increase of skin temperature and sweating</td>
</tr>
<tr>
<td>16.</td>
<td>Hand care of health care givers essential</td>
</tr>
</tbody>
</table>
References


Hand Decontamination And The Use of Gloves. ASPH NHS Trust


Pratt, R. J; Pellowe, C; Loveday, H. P; Robinson, N; Smith, G. W. and the Epic Project: Developing national evidence-based guidelines for preventing healthcare associated infections, phase 1 : Guidelines for preventing hospital acquires infections. Journal of Hospital Infection 47 (suppl) : 5182