Bacterial screening and transfusion transmitted infections UK, 2016

All platelets screened (% that were apheresis platelets)

- 15,000 (68%)
- 5,900 (76%)
- 9,300 (31%)
- 290,000 (58%)

<table>
<thead>
<tr>
<th>Confirmed positive</th>
<th>Bacteria originating from</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>skin</td>
</tr>
<tr>
<td>Apheresis</td>
<td>0.02</td>
</tr>
<tr>
<td>platelets</td>
<td>to 0.1%</td>
</tr>
<tr>
<td>Pooled</td>
<td>0.00</td>
</tr>
<tr>
<td>platelets</td>
<td>to 0.07%</td>
</tr>
</tbody>
</table>

All centres at NHSBT and SNBTS manufacture pooled platelets in Platelet Additive Solution (PAS).

McDonald et al. (2017), Bacterial screening of platelet components by National Health Service Blood and Transplant, an effective risk reduction measure. Transfusion, 57: 1122–1131. doi:10.1111/trf.14085

Transfusion transmitted infections*

- 108 suspected bacterial TTI investigations
  - 4 near misses detected prior to transfusion
    - 3 x Staphylococcus aureus;
    - 1 x Serratia marcescens
  - 66% Propionibacteria sp
- 18 suspected viral TTI investigations
  - 1 transfusion-transmitted hepatitis E virus (HEV) incident
  - 2 HEV outcomes awaited at time of SHOT report

TTIs are rare – in 10 years (2007-2016), 10 bacterial and 10 viral incidents have been confirmed.

All UK platelets are screened for bacteria and released as negative to date. Bed side vigilance and close inspection of the pack are required to avoid bacterial near miss incidents from being TTIs. Hospital staff are encouraged to continue reporting any suspected bacterial or viral cases to the blood service for investigation.

*more details on these cases can be found in the TTI chapter of the 2017 Annual SHOT report https://www.shotuk.org