Infection Prevention Guidelines

Surveillance and data collection (including reporting Healthcare Associated Infections (HCAI) to Public Health England)

<table>
<thead>
<tr>
<th>Author:</th>
<th>Jane Balderson (Infection Prevention Nurse)</th>
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<tbody>
<tr>
<td>Owner:</td>
<td>Infection Prevention Team</td>
</tr>
<tr>
<td>Date of first issue:</td>
<td>December 2012</td>
</tr>
<tr>
<td>Version:</td>
<td>3</td>
</tr>
<tr>
<td>Date of version issue:</td>
<td>January 2018</td>
</tr>
<tr>
<td>Approved by:</td>
<td>Infection Prevention</td>
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<tr>
<td>Review date:</td>
<td>January 2021</td>
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**Version History Log**

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<tr>
<th>Version</th>
<th>Date Approved</th>
<th>Version Author</th>
<th>Status &amp; location</th>
<th>Details of significant changes</th>
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<td>1</td>
<td>January 2013</td>
<td>Jane Balderson</td>
<td>Infection Prevention Nurse</td>
<td>Incorporates previous IP policy – Reporting HCAI to HPA</td>
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<td>2</td>
<td>January 2015</td>
<td>Jane Balderson</td>
<td>Infection Prevention Nurse</td>
<td>Converted to guidelines Health Protection Agency renamed Public Health England (PHE)</td>
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<tr>
<td>3</td>
<td>January 2018</td>
<td>Jane Balderson</td>
<td>Infection Prevention Nurse</td>
<td>Mandatory reporting revisions in line with PHE changes</td>
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1 Introduction

Surveillance in Infection Prevention and Control is the routine collection of data of infections, organisms and conditions, the analysis of the findings and the dissemination of the resulting information to key staff.

Surveillance helps to understand the prevalence, cost and effects of Health Care Acquired Infections (HCAI). It is the foundation for good infection prevention and control practice and can help direct care in areas of concern and assess the effectiveness of interventions. It can aid prevention and management of outbreaks through prompt recognition of clusters of cases.

2 Scope

These guidelines outline the Trust’s Infection Prevention surveillance and reporting processes, and the methods used to ensure timely mandatory reporting of Healthcare Acquired Infections (HCAI) to Public Health England (PHE).

3 Detail

3a Definitions

Bacteraemia – organisms present in the bloodstream that may cause infection.

*Clostridium Difficile Infection* (CDI) – infection caused by *Clostridium difficile* and detected by a positive test for *Clostridium difficile* toxin.

Healthcare associated infection (HCAI) – infection acquired by a patient as a result of contact with a healthcare provider.

HCAI data capture system – web based computer database for recording bacteraemia incidence and *Clostridium difficile*. The database is managed by PHE.

Surgical site infection (SSI) – infection in a wound following surgery.

Surgical site infection service (SSIS) – a data collection and analysis service managed by PHE. The PHE protocol and web link reporting system is used to collect and report SSI data.

3b Audit and Surveillance programme

Each fiscal year the IPT will update an audit and surveillance programme outlining its audit and surveillance plans, methods of data collection, timescale for completing projects, reporting procedures and project outcomes. Included in the programme will be mandatory and local audit and surveillance requirements. The programme will include
audits that monitor compliance with Infection Prevention policies and guidelines.

3c Reporting of bacteraemia and *Clostridium difficile* (CDI) toxin positive cases

There is a mandatory requirement to report the following bacteraemia cases and *Clostridium difficile* infections to PHE. Incidence is also reported internally by ward, directorate and Trust via the Infection Prevention dashboards.

- all cases of
  - Methicillin Resistant *Staphylococcus Aureus* (MRSA) bacteraemia,
  - *Staphylococcus aureus* (MSSA) bacteraemia,
  - Gram negative organisms including *Escherichia coli* (E coli), *Klebsiella* species and *Pseudomonas aeruginosa* bacteraemia

- all cases of *Clostridium difficile* infection (CDI) in patients aged two years and older where the specimen is diarrhoeal in nature and positive for toxin presence.
Process for data collection - Trust and mandatory reporting of bacteraemia and Clostridium difficile cases

Positive result from microbiological testing of blood cultures/ stool specimen identified through laboratory database search
Results are cross referenced against Infection Prevention records

Recurring positives from the same patient are considered a new case where the specimen has been taken 14 days or more after a previously reported bacteraemia or 28 days or more after previously reported CDI (as per PHE definition of case)

Cases are attributed according to Public Health England categories

Mandatory reports

All new positive results from specimens tested in York Trust laboratories including inpatients, outpatients, regular attenders and General Practitioner specimens must be reported to PHE via the PHE website if they fit the PHE criteria

IPT enter all positive results for a calendar month by the 14th day of the succeeding month
The Chief Executive is required to ‘lock down’ the data for each calendar month by the 15th day of the succeeding month

The total number of blood culture tests are reported quarterly by the 12th day of the second month in the succeeding quarter

Trust reports

Weekly Trust reports produced by IPT for Trust senior management staff and Quality and Safety
Weekly email sent to Trust clinical staff

Monthly Infection Prevention dashboards produced by
- Ward
- Directorate
- Hospital site
- Trust
Reports are actual numbers and rate per 100,000 bed days
3d Surgical site infection (SSI) surveillance

Surgical site surveillance should be considered following:

- concern raised by clinical staff
- an increase in infection incidence
- increased readmission rates with SSI
- a risk identified within a theatre or ward environment
- mandatory requirement for orthopaedic surgery. The Trust must participate for a minimum three month period each fiscal year in at least one of four orthopaedic surgical procedures. The PHE SSIS protocol must be followed and results reported via a PHE web-link. PHE will produce a report of the findings and the Trust position against the national benchmark.

IPT will support clinical teams who wish to carry out SSI surveillance. The surveillance should consider the following data collection:

- Core Patient Database theatre and patient records.
- Ward based surgical site observation records
- Post-surgery wound swab results
- Post discharge follow up around 30 days following surgery via outpatient clinics and /or patients
- Readmissions of patients with surgical site infections

3e Outbreak incident report

When a bacterial, viral, infestation or influenza outbreak is declared by the Trust, an electronic report will be sent by IPT to the North Yorkshire and Humber Health Protection Unit (HPU).

For outbreaks confirmed or clinically suspected of being as a result of Norovirus the PHE Norovirus definition is used to decide which outbreaks should be reported.

The report includes:

- details of ward/ department closed
- number of days ward/ department closed
- number of patients and staff affected
- cause if known/ confirmed.

Updated reports continue until the outbreak is declared over and the ward/ department have reopened.

In addition the Trust reports Norovirus ward closures to PHE Hospital Norovirus Outbreak Incident Surveillance System.
4 Accountability

All healthcare professionals and volunteers are responsible and accountable to the Chief Executive for the correct implementation of these guidelines.

Professional staff are accountable according to their professional code of conduct.

The IPT are responsible for accurate and timely reporting of HCAI to external bodies

5 Dissemination and Implementation

These guidelines once agreed by the Infection Prevention Team and Infection Control Doctors will be approved at the Infection Prevention and Environmental Operational Group (IPEOG) and will then be published on both Staffroom and the Trusts internet site.

6 Monitoring and Auditing

<table>
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<th>Minimum Requirements</th>
<th>Monitoring</th>
<th>Responsibility for monitoring</th>
<th>Frequency</th>
<th>Reported to</th>
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<tr>
<td>Accurate reporting of bacteraemia and Clostridium difficile infection cases</td>
<td>Cross reference of cases from laboratory sources By external checking of cases by PHE</td>
<td>Infection Prevention Team</td>
<td>By case Monthly report</td>
<td>Directorates via Infection Prevention dashboards</td>
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<td>Accurate reporting of surgical site infections</td>
<td>Through follow up and Post Infection Review of cases</td>
<td>Clinical leads within directorate Infection Prevention Team</td>
<td>Reported during or on completion of surveillance</td>
<td>Directorates</td>
</tr>
<tr>
<td>Accurate reporting of outbreaks to PHE</td>
<td>Monitored by PHE using laboratory results</td>
<td></td>
<td>As outbreaks occur</td>
<td>Public Health England</td>
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7 Consultation
These guidelines will be circulated for comment between the Infection Prevention Team and the Infection Control Doctor, following consultation with clinical stakeholders the guideline will be approved at IPOG

8 External References
HCAI data capture system and protocol -
https://hcaidcs.phe.org.uk/(X(1)S(ipdkgr5ye0jxj1zags0qphn5))/WebPages/InternalContentPage.aspx?46S8uoMbWMmZunSnMzFhYCLPquAYRF0Z

Guidance on the definition of healthcare associated gram-negative bloodstream infections -
https://hcaidcs.phe.org.uk/ContentManagement/LinksAndAnnouncements/HCAI_Supporting_Documents_GNBSI_definitions_guidance.pdf

Surgical site infection surveillance protocol -

Norovirus web based reporting - http://www.hpa-bioinformatics.org.uk/noroOBK/