# Protective Isolation Policy

<table>
<thead>
<tr>
<th>Post holder responsible for Guidance</th>
<th>Judy Potter, Lead Nurse Infection Prevention &amp; Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author of Guidance</td>
<td>Judy Potter, Lead Nurse Infection Prevention &amp; Control</td>
</tr>
<tr>
<td>Division/ Department responsible for Procedural Document</td>
<td>Specialist Services/Infection Control</td>
</tr>
<tr>
<td>Contact details</td>
<td>x2355</td>
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<tr>
<td>Date of original document</td>
<td>1997</td>
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<tr>
<td>Impact Assessment performed</td>
<td>Yes/ No</td>
</tr>
<tr>
<td>Ratifying body and date ratified</td>
<td>Infection Control &amp; Decontamination Assurance Group: 17th May 2017</td>
</tr>
<tr>
<td>Review date (and frequency of further reviews)</td>
<td>November 2021 (every 5 years)</td>
</tr>
<tr>
<td>Expiry date</td>
<td>May 2022</td>
</tr>
<tr>
<td>Date document becomes live</td>
<td>11 July 2017</td>
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Please specify standard/criterion numbers and tick ✓ other boxes as appropriate

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<tr>
<th>Monitoring Information</th>
<th>Strategic Directions – Key Milestones</th>
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<tr>
<td>Patient Experience</td>
<td>Maintain Operational Service Delivery</td>
</tr>
<tr>
<td>Assurance Framework</td>
<td>Integrated Community Pathways</td>
</tr>
<tr>
<td>Monitor/Finance/Performance</td>
<td>Develop Acute services</td>
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<tr>
<td>CQC Fundamental Standards - Regulation:</td>
<td>Infection Control ✓</td>
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Other (please specify):

Note: This document has been assessed for any equality, diversity or human rights implications

## Controlled document

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## Full History

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<td>May 2016</td>
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### Associated Trust Policies/Procedural documents:
- Standard infection control policy & procedures (including hand hygiene)

### Key Words
- Neutropenia
- Immunocompromised
- HEPA
- Hand hygiene

### In consultation with and date:
- Infection Prevention & Control Team: 4th May 2016
- Infection Control Operational Group: 24th May 2016
- PEP: 5th April 2017
- Head of Chaplaincy and Volunteer Services/Patient Equality Lead: 19th April 2017
- Full membership of the Infection Control and Decontamination Assurance Group which includes representation from the executive team, divisional management teams (including community services), nursing and medical staff, therapists, facilities, operations support, estates and Public Health England's Devon/Cornwall and Somerset Local Team: 17th May 2017

### Contact for Review:
- Lead Nurse

### Executive Lead Signature:
- Medical Director
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1. **INTRODUCTION**

1.1 The purpose of protective isolation is to provide a safe environment for patients who have an increased susceptibility to infection because they have a compromised immune system (immunosuppressed) or extensive skin loss due to burns or other trauma.

1.2 Generally these patients are most at risk from their own resident flora (endogenous infection) but must also be protected from the risk of cross infection (exogenous infection).

1.3 The most common reason for placing a patient in protective isolation is if the blood neutrophil count falls, or is expected to fall, below $0.5 \times 10^9/L$. Although immunosuppression may occur for many reasons, including organ transplants, extensive burns, some genetic disorders and infection with Human Immunodeficiency Virus (HIV), it is commonly encountered in cancer services. This is due to high-dose chemotherapy and occurs particularly in patients with haematological malignancies who are given bone marrow or stem cell transplants. These patients may also receive prophylactic antifungals and/or antibiotics to reduce the risk of endogenous infection.

1.4 The decision to institute protective isolation is made by the clinician caring for the patient or on the advice of the Infection Prevention and Control Team (IPCT), Haematologist or Oncologist.

1.5 **Failure to comply with this policy could result in disciplinary action.**

2. **PURPOSE**

2.1 Provide Royal Devon & Exeter NHS Foundation Trust (hereafter referred to as “the Trust”) staff with the information they need to manage patient/s that are identified as requiring protective isolation.

3. **DEFINITIONS**

3.1 **Neutropenic** – is when the neutrophil count is below $0.5 \times 10^9/L$

3.2 **HEPA** - High-efficiency particulate air

3.3 **Immunocompromised** - having an impaired immune system and therefore incapable of having an effective immune response.

4. **DUTIES AND RESPONSIBILITIES OF STAFF**

4.1 **The Chief Executive and Board of Directors** are responsible for ensuring the provision of suitable and sufficient resources and facilities to enable effective management of a neutropenic patient.

4.2 Each **Divisional Management Team** has a responsibility to actively encourage compliance with the policy by:

- Giving due consideration to the recommendations of the Infection Prevention and Control Team with regard to the provision and use of single rooms.

- Consulting at an early stage in planning of any service developments or building works to enable the Infection Prevention and Control Team to assess impact and advise on infection prevention and control.
4.3 **Infection Prevention and Control Team (ICT) including the Directors for Infection Prevention and Control are responsible for**

- Advising the Trust on current best practice/policy for isolation or segregation of immunocompromised patients.
- Advising the Trust on current best practice in planning isolation facilities for new construction and refurbishment work.
- Providing advice to clinical teams regarding individual patient infection risks, risk assessment and minimisation, and isolation. The ICT will provide policies, guidelines and training to ensure that clinical teams have the knowledge and resources to implement appropriate control measures in most circumstances.

4.3 **Site Management Team** is responsible for ensuring that:

- Isolation facilities are provided promptly when the need is identified.
- Allocation of single rooms is based on a clinical risk assessment with infection prevention and control requirements given priority over bed management/capacity issues (Healthcare Commission, 2006).

4.5 **Clinical staff providing patient care** are responsible for:

- Assessing patients on admission for risk of neutropenia
- Ensuring that suspected or confirmed immunocompromised status is clearly documented in the care record.
- Ensuring that infection prevention and control alerts for patients with short term infectious conditions are added to and deleted from the e-white board when appropriate so that infectious status is apparent.
- Ensuring that patients are isolated appropriately
- Ensuring that information about their immunocompromised state is communicated to receiving wards and departments in advance to ensure that appropriate facilities are available and any special arrangements are in place.

5. **ACCOMMODATION**

5.1 Although there is conflicting evidence regarding the value of single room isolation for most immunocompromised patients, it may be that a single room helps to reinforce the need for rigorous attention to standard infection control precautions. Also immunocompromised individuals should never be placed in the same room or adjacent to people with a known infection. Therefore ideally patients should be nursed in a single room, preferably with en-suite facilities and the door should be kept closed.

5.2 Ideally neutropenic patients should be nursed in isolation rooms with HEPA filtered air at positive pressure as this may help to reduce exposure to airborne infections, particularly Aspergillus. This is especially relevant when refurbishment, building or demolition works are in progress nearby. In order for the system to work effectively windows and doors must be kept shut at all times. Single rooms with positive pressure ventilation will usually have an ante-room. For maximum effect, only one of the doors in the ante-room should be open at any time when entering or leaving the cubicle.
5.3 NB A highly susceptible patient may become infected and therefore potentially a hazard to other patients on the ward such that source isolation is also required. In this situation the positive pressure ventilation should be switched off and neutral pressure maintained until the patient is no longer infectious.

5.4 Since all single rooms on Yarty Ward now have magnehelic gauges, pressure can be monitored from outside each room. For patients needing neutral pressure due to infection, the pressure should be set to zero.

6. COMMUNICATION

- Explain the rationale for isolation to the patient and, where possible the duration of isolation anticipated.
- Place the appropriate isolation card on the door to the room.
- Record in the patient notes that isolation has been commenced and the reason why.
- Revise the nursing care plan.

7. INFECTION CONTROL PRECAUTIONS

7.1 Standard infection control precautions must be applied when providing care to neutropenic or other severely immunosuppressed patients, in particular:

7.1 Hand Hygiene

7.1.1 Strict attention must be paid to hand decontamination in accordance with the Trust Standard infection control policy & procedures (including hand hygiene) and the World Health Organisation ‘5 Moments’ for Hand Hygiene.

7.2 Protective Clothing

7.2.1 Disposable, single use plastic aprons should be worn for all clinical procedures to provide a protective barrier that will minimise the risk of transmission of microorganisms to the patient. Non-sterile gloves must be worn for contact with body fluids as per standard infection control precautions.

7.3 Decontamination of Equipment

7.3.1 Disposable equipment should be used whenever possible. Non-disposable equipment must be cleaned before and after use in accordance with the decontamination policy. Wherever possible equipment should be allocated for the sole use of the patient during their admission.

7.4 Decontamination of the Environment

7.4.1 It is important that the room is kept as clean as possible. The room must be cleaned prior to the admission of a patient and thereafter at least as often as other patient areas, using standard daily cleaning procedures. Protective isolation rooms should be cleaned before other patient areas. Cloths must be disposable, and a freshly laundered or new disposable mop head used. Any parts of the environment that are damaged e.g. plasterwork, bathroom sealant and cannot be cleaned effectively must be reported to the ward matron and to Estates for urgent attention.
8. PATIENT HYGIENE

8.1 Most infections are endogenous so measures to contain the body’s normal flora are important. These include good personal hygiene, regular mouth care, and supportive care to maintain the integrity of skin and mucous membranes.

- Patients should preferably have en suite toilet and showering facilities. If this is not possible a commode or toilet should be allocated for their sole use.
- Patients can shower or bath in shared facilities as long as these areas are thoroughly cleaned immediately prior to use.
- Patients personal hygiene needs must be assessed on a daily basis and assistance given where required to maintain an acceptable level of cleanliness. Particular care needs to be given to the perianal area which is heavily colonised with bacteria. Immunocompromised patients frequently suffer irritation or infection of this area. It is felt that this can be exacerbated by the use of soap which may irritate the mucous membranes. Therefore the use of warm water alone is recommended (Lindell & Olsson 1989).
- Disposable cloths rather than flannels must be used and towels must be changed daily.

9. DIET

9.1 Although the immunocompromised patient is at increased risk of food-borne illness and the acquisition of harmful microorganisms from some food types, they otherwise have a low risk of acquiring infection from other cleanly prepared food. As a result, they are advised to take some specific precautions (see below), but are also told to observe good food hygiene and maintain a well-balanced, nutritious diet particularly since they may have increased nutrient demand from chemotherapy or other illness. For further information please refer to local dietary guidelines for neutropenic patients compiled by the Department of Nutrition & Dietetics.

9.2 Foods considered to by high risk, including soft cheeses and raw eggs; these should be avoided by immunocompromised patients.

9.3 Immunocompromised patients can safely drink tap water drawn from a rising main, however, this water could potentially become colonised by organisms, particularly gram-negative bacteria found in the plughole of sinks and overflow outlets. Gram-negative bacteria may represent a particular risk for neutropenic individuals; therefore care must be taken when filling jugs to prevent contamination of the water from these sources. The water must not be drawn from sinks located within ensuite facilities as these sinks are more likely to harbour gram-negative bacteria. Water should be sourced from the mains tap in the ward kitchen. The tap should be run for 2 minutes before use and water jugs should be re-filled twice daily.

9.4 Commercially available non-carbonated bottle water may contain large numbers of gram-negative bacteria and therefore should be avoided. Carbonated bottled water is considerably safer than non-carbonated because of the low pH of these products; the low pH can however result in poor patient acceptability in patients with chemotherapy associated mucositis.
10. **FLOWERS**

10.1 Flowers and plants have not been directly linked to infection in immunocompromised patients, however, they could potentially be a reservoir for gram negative bacteria or fungal spores. Therefore pot plants are inappropriate. If fresh flowers are to be kept in the room the water must be changed daily - not in the cubicle wash basin.

11. **PSYCHOLOGICAL EFFECT OF ISOLATION**

11.1 Many studies have shown the detrimental effect of isolation on patients’ psychological well-being (Gammon 1998, Knowles 1993). Some patients may find it beneficial to leave their isolation room for short periods of time or for mobilisation purposes. Patients can leave their isolation rooms for short periods as long as they avoid contact with crowds, other patients or people with infections. This may be easier to achieve during quieter periods on the ward, such as rest periods. This must be carefully explained to patients who may find it confusing.

12. **STAFF ILLNESS**

12.1 Particular caution is required when working with immunocompromised patients and therefore staff with upper-respiratory tract infections or oral-facial herpes simplex should be excluded from direct contact with these patients.

13. **VISITORS**

13.1 The patient may receive visitors. However, visitors should report to a member of staff before entering the room so that precautions can be explained and any infections in the visitor which might be dangerous to the patient can be identified. Visitors must be excluded if they have any form of transmissible infection.

13.2 The efficiency of the ventilation system will be severely compromised by large numbers of visitors. Numbers should be restricted to no more than two at a time.

13.3 Coats and jackets should be removed before entering the room. It is not necessary for visitors to wear protective clothing, unless they are performing assistance with personal care, when a disposable plastic apron should be worn. Visitors must be advised of the importance of hand hygiene before entering the room.

14. **WARD ROUNDS**

14.1 Members of staff should be bare below the elbows with hands decontaminated on entering the room using soap and water or alcohol gel.

14.2 The number of people entering the isolation room should be kept to an absolute minimum.

14.3 Wherever possible, equipment such as stethoscopes or patella hammers, should be allocated to each patient for sole use throughout their stay. Where this is not possible, equipment such as patella hammers must be cleaned with a detergent impregnated wipe before and after use. Disposable single use ear-pieces should be used with auroscopes. The external surfaces of the auroscope must be cleaned before and after use with a detergent impregnated wipe.
15. **ARCHIVING ARRANGEMENTS**
The original of this policy will remain with the author, Lead Nurse for Infection Prevention & Control. An electronic copy will be maintained on the Trust Intranet, I – Infection Control – protective isolation guidance. Archived electronic copies will be stored on the infection control shared drive “old policies”, and will be held indefinitely. A paper copy (where one exists) will be retained for 10 years.

16. **PROCESS FOR MONITORING COMPLIANCE WITH AND EFFECTIVENESS OF THE POLICY**

16.1 To monitor compliance with this policy the auditable standards will be monitored as follows:

<table>
<thead>
<tr>
<th>No</th>
<th>Minimum Requirements</th>
<th>Evidenced by</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>Patients with suspected or confirmed neutropenia will be placed appropriately in single rooms</td>
<td>Annual audit of Patient Placement, isolation facilities</td>
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16.2 **Frequency**
In each financial year, the Infection Prevention and Control Team will audit as part of the patient placement audit to ensure that this policy has been adhered to and a formal report will be written and presented at the Infection Control and Decontamination Assurance Group.

16.3 ** Undertaken by**
Infection prevention & control team.

16.4 **Dissemination of Results**
At the Infection Control & Decontamination Assurance Group, which is held quarterly.

16.5 **Recommendations/ Action Plans**
Implementation of the recommendations and action plan will be monitored by the Infection Control & Decontamination Assurance Group, which meets quarterly.

16.6 Any barriers to implementation will be risk-assessed and added to the risk register.

16.7 Any changes in practice needed will be highlighted to Trust staff via the Governance Managers’ cascade system.

17. **REFERENCES**


COMMUNICATION PLAN

The following action plan will be enacted once the document has gone live.

<table>
<thead>
<tr>
<th><strong>Staff groups that need to have knowledge of the strategy/policy</strong></th>
<th>All clinical staff</th>
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<td><strong>The key objectives</strong></td>
<td>To provide staff with the information they need to manage patient/s that are identified as requiring protective isolation</td>
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<tr>
<td><strong>How new staff will be made aware of the policy and manager action</strong></td>
<td>Managers should direct staff to familiarise themselves with policies on Hub.</td>
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<tr>
<td><strong>Specific Issues to be raised with staff</strong></td>
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<td><strong>Any other requirements</strong></td>
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<tr>
<td><strong>Issues following Equality Impact Assessment (if any)</strong></td>
<td>No negative impacts</td>
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<td><strong>Location of hard / electronic copy of the document etc.</strong></td>
<td>Hard copy of guidance in Infection Prevention and Control Office. Available electronically on HUB</td>
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APPENDIX 2: EQUALITY IMPACT ASSESSMENT TOOL

<table>
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<tr>
<th>Name of document</th>
<th>Protective Isolation Policy</th>
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<tr>
<td>Division/Directorate and service area</td>
<td>Trustwide</td>
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<tr>
<td>Name, job title and contact details of person completing the assessment</td>
<td>Judy Potter, Lead Nurse/Joint Director for Infection Prevention and Control</td>
</tr>
<tr>
<td>Date completed:</td>
<td>29/03/2017</td>
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</table>

The purpose of this tool is to:

- **identify** the equality issues related to a policy, procedure or strategy
- **summarise the work done** during the development of the document to reduce negative impacts or to maximise benefit
- **highlight unresolved issues** with the policy/procedure/strategy which cannot be removed but which will be monitored, and set out how this will be done.

1. **What is the main purpose of this document?**

   Provide Royal Devon & Exeter NHS Foundation Trust (hereafter referred to as “the Trust”) staff with the information they need to manage patient/s that are identified as requiring protective isolation.

2. **Who does it mainly affect?**

   Carers ☐  Staff ☒  Patients ☒  Other (please specify)

3. **Who might the policy have a ‘differential’ effect on, considering the “protected characteristics” below?** (By *differential* we mean, for example that a policy may have a noticeably more positive or negative impact on a particular group e.g. it may be more beneficial for women than for men)

   *Please insert an “x” in the appropriate box (x)*

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<td>Disability</td>
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<td>☒</td>
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<tr>
<td>Sex - including: Transgender, and Pregnancy / Maternity</td>
<td>☐</td>
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<tr>
<td>Race</td>
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<td>Religion / belief</td>
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<tr>
<td>Sexual orientation – including: Marriage / Civil Partnership</td>
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4. **Apart from those with protected characteristics, which other groups in society might this document be particularly relevant to...** (e.g. those affected by homelessness, bariatric patients, end of life patients, those with carers etc.)?
5. Do you think the document meets our human rights obligations? ☒

Feel free to expand on any human rights considerations in question 6 below.

A quick guide to human rights:

- **Fairness** – how have you made sure it treat everyone justly?
- **Respect** – how have you made sure it respects everyone as a person?
- **Equality** – how does it give everyone an equal chance to get whatever it is offering?
- **Dignity** – have you made sure it treats everyone with dignity?
- **Autonomy** – Does it enable people to make decisions for themselves?

6. Looking back at questions 3, 4 and 5, can you summarise what has been done during the production of this document and your consultation process to support our equality / human rights / inclusion commitments?

N/A

7. If you have noted any ‘missed opportunities’, or perhaps noted that there remains some concern about a potentially negative impact please note this below and how this will be monitored/addressed.

<table>
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<td>How is this going to be monitored/ addressed in the future:</td>
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<td>Group that will be responsible for ensuring this carried out:</td>
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*Protective Isolation Policy*
*Ratified by: Infection Control & Decontamination Assurance Group: 17th May 2017*
*Review date: November 2021*