# ESBL POLICY – EXTENDED SPECTRUM BETA – LACTAMASE PRODUCING ORGANISMS

Version 9: March 2023

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### 1. INTRODUCTION

ESBL producing strains are bacteria that produce an enzyme called extended spectrum beta lactamase, which makes them more resistant to antibiotics and makes the infections harder to treat. ESBL producing *E. Coli* are antibiotic resistant strains of *E. coli*. *E. coli* are very common bacteria that normally live harmlessly in the gut. ESBL producing *Klebsiella* species are often found in urine or respiratory system. In many instances, only two oral antibiotics and a very limited group of intravenous antibiotics remain effective.

Most of the infections have occurred in people with other underlying medical conditions who are already very sick, and in elderly people. Patients who have been taking antibiotics or who have been previously hospitalised are mainly affected.

Further research is needed to look at risk factors associated with ESBLs and how they are transmitted between patients and also in the community.

Rapid diagnosis is an important factor and recognition that the bacteria causing infection are resistant to antibiotics, so that the most appropriate treatment can be prescribed quickly.

Robust infection control measures are essential to prevent the spread of infection.

# 2. PURPOSE

The purpose of this policy and procedure is to ensure that staff understand the principles of precautions to be observed when caring for patients colonised or infection with ESBL organisms.

### 3. SCOPE

This policy and procedure relates to all staff employed by East Coast Community Healthcare CIC (ECCH).

# **4. DEFINITIONS** (if relevant)

The following definitions are intended to provide a brief explanation of the various terms used within this policy.

Term	Definition
Policy	A policy is a formal written statement detailing an enforceable set of principles or rules. Policies set the boundaries within which we operate. They also reflect the philosophy of our organisation.
ESBL	Extended spectrum beta lactamase

### 5. **RESPONSIBILITIES**

- **ECCH Employees** Are responsible for the implementation of this policy and following the requirements of the policy.
- Chief Executive of ECCH Overall responsibility for the enforcement of this policy lies with the Chief Executive of ECCH
- ECCH Managers Are responsible for ensuring staff adhere to this policy
- IPACC Is responsible for reviewing and approving all IP&C policies

### 6. POLICY STATEMENT

This policy will be implemented to ensure adherence to safe practice.

# 7. PROCEDURE

# Precautions to be observed when caring for patients with ESBL's

- Strict standard infection control precautions must be maintained by all health care professionals at all times.
- If inpatient, colonised or infected patients **must** be nursed in a single room.
- If inpatient, all bed linen, if contaminated with urine or faeces, should be placed into a red plastic water-soluble bag, this in turn must be placed inside a white linen laundry bag.
- Clean, unsterile nitrile gloves must be worn when entering the single room.
- A clean plastic apron must be worn if there is to be prolonged contact with an infected or colonised patient
- Gloves and aprons must be removed and disposed of in the orange bag waste stream before leaving the room. Hands should then be immediately and thoroughly washed and dried.
- Ensure that separate items such as stethoscopes, sphygmomanometers or rectal thermometers are kept separately from those used for non – colonised or infected patients. All items used on affected patients must be thoroughly cleaned before returning to communal use.
- If inpatient, after the single room has been vacated the bed, bed table and locker should be washed using hot water, detergent and finally 1:10,000ppm sodium hypochlorite.
- On transfer/discharge, the transfer handover and paperwork must mention the ESBL status and the GP must be informed.
- In the patient's own home the risk of infection to home contacts is low, unless they have indwelling devices or serious underlying disease. They should be encouraged to maintain sensible high standards of general hygiene and should be reassured.

Anyone receiving a lot of antibiotics, in particular if the course of antibiotics has not been completed for the prescribed period of time, may be at increased risk of getting the bacteria.

### **Treatment**

It is important to ensure that antibiotics are prescribed only when needed, in the right dose, for the right duration, so as to reduce resistance developing in bacteria.

### 8. MONITORING AND REVIEW

This document will be reviewed by the Infection Prevention & Control Team in March 2025, or sooner if changes in legislation occur or new best practice evidence becomes available. It is the responsibility of all department heads/professional leads to ensure that the staff they manage adhere to this policy.

# 9. **REFERENCES** (if relevant)

- Department of Health (2014) Extended Spectrum Beat-Lactamase: treatment, prevention and surveillance. 01/12/2013. <a href="https://www.gov.uk/government/publications/extended-spectrum-beta-lactamases-esbls-treatment-prevention-surveillance/extended-spectrum-beta-lactamases-esbls-fags">https://www.gov.uk/government/publications/extended-spectrum-beta-lactamases-esbls-treatment-prevention-surveillance/extended-spectrum-beta-lactamases-esbls-fags</a> (accessed 13/01/2023)
- European Centre for Disease Control (2014) Systemic review of the effectiveness of infection control measures to prevent the transmission of extended-spectrum beta-lactamase-producing Enterobacteriacaeae through cross-border transfer of patients.
   Stockholm. <a href="http://ecdc.europa.eu/en/publications/Publications/ESBL-systematic-review-effectiveness-infection-control-measures.pdf">http://ecdc.europa.eu/en/publications/Publications/ESBL-systematic-review-effectiveness-infection-control-measures.pdf</a> (Accessed 13/01/2023)
- GOV.UK 2019 <a href="https://www.gov.uk/government/publications/urinary-tract-infection-diagnosis">https://www.gov.uk/government/publications/urinary-tract-infection-diagnosis</a> (Accessed 13/01/2023)
- Nice (2015) <a href="https://www.nice.org.uk/guidance/qs90/chapter/List-of-quality-statements">https://www.nice.org.uk/guidance/qs90/chapter/List-of-quality-statements</a> (Accessed 13/01/2023)

# 10. AUTHOR

Infection Prevention & Control Team March 2023

# 11. EQUALITY & DIVERSITY IMPACT ASSESSMENT

In reviewing this policy, the HR Policy Group considered, as a minimum, the following questions:

- Are the aims of this policy clear?
- Are responsibilities clearly identified?
- Has the policy been reviewed to ascertain any potential discrimination?
- Are there any specific groups impacted upon?
- Is this impact positive or negative?
- ② Could any impact constitute unlawful discrimination?
- ② Are communication proposals adequate?
- Does training need to be given? If so is this planned?

Adverse impact has been considered for age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion and belief, sex, sexual orientation.

Blank version of the full Equality & Diversity Impact assessment can be found here:

http://eccho/Home/FormsGuidance.aspx?udt\_575\_param\_index=E&udt\_575\_param\_page=2

# 12. DOCUMENT CONTROL

Version Date	Version No.	Author/ Reviewer	Comments
March 2011	3	IPCT	Updated references
December 2012	4	IPCT	
December 2014	5	IPCT	
January 2017	6	IPCT	
December 2018	7	IPCT	
June 2021	8	IPCT	
March 2023	9	IPCT	

# **DOCUMENT CONTROL SHEET**

Name of Document:	ESBL policy on precautions to be observed when caring for patients colonised or infected with Extended Spectrum Beta-Lactamase producing organisms (ESBL's)	
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Date Of This Version:	March 2023	
Produced By (Designation):	Infection Prevention & Control Team	
Reviewed By:	IPACC (Infection Prevention & Control Committee)	
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Synopsis And Outcomes of Equality and Diversity Impact Assessment:	No specific issues. National EIA gives more details on measures to reduce HCAIs.	
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Enquiries To:	infectionprevention@ecchcic.nhs.uk
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