

ESBL's – at-a-Glance

DEFINITION	ESBL or Extended Spectrum Beta Lactamase is an enzyme which is resistant to many penicillin and cephalosporin antibiotics and often other antibiotics (PHE 2014). The most common ESBL producing strains of bacteria are <i>Escherichia coli</i> and <i>Klebsiella pneumoniae</i>. Anyone can be infected with an ESBL producing bacteria but those at highest risk are the elderly, individuals with underlying medical conditions that are already unwell or who have been taking antibiotics, those who have received healthcare abroad in areas where ESBL infections are more common, and those in contact with patients with ESBL producing bacteria.
MANAGEMENT	ESBL bacteria are spread through contact; therefore 'contact precautions' should be put in place. The patient should be isolated with contact precautions in place, preferably in a single room. If a single room is not available or the patient is moved out of the single room, please discuss with Infection Prevention and Control. Hand hygiene is crucial to reduce risk of transmission. - Put an OUH approved contact precautions isolation sign on the outside of the single room door. (See IPC intranet for guidance) - The door must be closed. - Use Hand Hygiene as per the WHO Five Moments. - Aprons and gloves to be worn for all direct patient contact and contact with patient's surroundings. (Relatives and visitors do not need to wear gloves and aprons but be asked to wash their hands before leaving the room and not visit other patient areas) - Inform the patient of their infectious status and explain why they are isolated. - Ensure receiving area is aware of ESBL status. - Put used linen in a red alginate bag and then into the usual white plastic linen bag. - If a patient is transferred to another hospital inform staff and complete an inter-healthcare transfer form to send with the patient. Keep a copy for documentation.
CLEANING	Dedicated equipment or single use equipment for their use. Clean re-usable equipment with Green Clinell wipes. A terminal clean of the room or bed space is required when the patient is discharged or transferred from the room. Patient does not need to go last on the theatre list and no terminal clean of operating theatres is required, standard cleaning is sufficient between patients.
ISOLATION	Re-admissions should be isolated and nursed with contact precaution preferably in a single room. De-isolation should only occur on a case by case basis after discussion with the Infection Prevention and Control team. Exception: Babies who were identified as ESBL positive whilst in the neonatal unit can be unflagged for ESBL 6 months from discharge from the neonatal unit (or 6 months from first last negative sample if this was achieved before discharge), as long as no recurrent/prolonged contacts with healthcare or received systemic antibiotics on more than one occasion or ESBL positive samples post-discharge from the neonatal unit. No rescreening of babies required (ie. ESBL screening should only performed whilst on the NICU). If baby still considered ESBL positive (ie. within 6 months of discharge) and is listed for surgical procedure, contact precautions should be used.

ADDITIONAL INFORMATION

For further information or advice please contact Infection Prevention & Control on Bleep 1747 or out of hours contact Microbiology via Switchboard.

Infection Prevention & Control Service
March 2025 / AS