

Division of Laboratory Medicine

Bacteriology

Rapid/Routine Carbapenemase-Producing Enterobacteriaceae (CPE) Screen

In response to the increasing numbers of CPE producing clinical isolates of Enterobacteriaceae the Infection Control Consultant and Microbiology department have produced a protocol for CPE screening and detection. The isolation of a clinical CPE isolate prompts the Infection Prevention & Control Team to screen all possible patient contacts to reduce the transmission of resistance enzymes within the Trust.

Rapid & routine CPE screens are processed on a molecular platform; culture is only performed on positive samples for epidemiological & monitoring purposes.

General information

Collection container (including preservatives):

Swab: Double headed Red topped swab; available from Microbiology. Please note Charcoal swabs are unsuitable for this test at the Oxford Road campus and will not be processed.



Specimen type: Screening of faeces/rectal swabs

Samples are stored in Microbiology for 7 days should any additional tests be requested.

Specimen transport: If processing is delayed, refrigeration is preferable to storage at ambient temperature. Delays of over 48hr are undesirable.

Type and minimum volume of sample: Not applicable

Special precautions: None

Laboratory information

Measurement units: Threshold Cycle (CT)

Biological reference units: Not applicable

Turnaround time:

Rapid CPE Screens: Designated wards agreed with IPC

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Trafford Transfers: 2-4 hours from receipt into Microbiology Reception. The laboratory MUST be telephoned prior to the patient(s) being sampled.

Samples should be received in the laboratory before 6pm (Mon-Fri) and before 4pm (Weekends/Bank Holidays)

Routine CPE Screen: Designated wards agreed with IPC 24-72hrs

Clinical information

Clinical decision points: Not applicable

Factors known to significantly affect the results: Faecal material must be visible on the cotton tip of the swab; failure to provide faecal material may produce a false negative screening result.

Some faecal products may prove inhibitory to the PCR process; samples will be reported as inhibitory and a repeat will be requested.

(Last updated August 2019)