

Table S1 – Frequencies of ESBL positive gram negative taxa observed in the dataset. *E. coli* and other Enterobacteriaceae (e.g. *Citrobacter*, *Klebsiella*) were the most common species observed. Some genera were isolated in very low numbers, (e.g. *Stenotrophomonas*, *Aeromonas*).

| Taxa | Number of Isolates |
|-----------------------------|--------------------|
| <i>E. coli</i> | 219 |
| <i>Citrobacter</i> | 28 |
| <i>Klebsiella</i> | 16 |
| <i>Enterobacter cloacae</i> | 11 |
| <i>Acinetobacter</i> | 12 |
| Other | 20 |
| Total | 306 |

Figure S1 – Distribution of observed *E. coli* sequence types sorted by participant number and date. In some instances, there are clear single sequence types that longitudinally colonise a single participant (e.g. 1722, Participant 03). Other participants exhibit transient colonisation by multiple sequence types (e.g. Participant 33).

| | | Participant Number | | | | | | | | | | | | | | | | | | | | | |
|-----------------|--------|--------------------|-----|------|------|----------|----------|------|-----|------|----------|------|-----|----------|------|------------|-----|----------|----------|----------|-----|-----|-----|
| | | 03 | 04 | 05 | 06 | 08 | 09 | 11 | 12 | 13 | 16 | 17 | 18 | 19 | 21 | 23 | 26 | 33 | 34 | 35 | 36 | 40 | |
| Collection Date | 19-Sep | | | | | | | | | | | | | | | | | 34 | | | | | |
| | 20-Sep | | 101 | | | 69 | 4682 | | | | | | | | | 5895 | | 34 | | 167 | | | |
| | 21-Sep | | | | | 69 | 1072 | | | | | | | | 457 | 5895 | | 34 | 1081 | 5848 | | | |
| | 22-Sep | | | | | 69 | 48 & 101 | | | | | | | | | 5895 | | | 167 | 167 | | 195 | |
| | 23-Sep | 195 | 101 | | | 69 & 195 | 48 | | 394 | | | | | 101 & 34 | | | | 34 | | 34 & 101 | | 195 | |
| | 24-Sep | | | | | 195 | 48 | | | 101 | | 1638 | | | 457 | 5895 | 10 | 34 & 195 | | | | 195 | |
| | 25-Sep | 1722 | | | 3285 | 69 | | | 394 | 101 | 101 | 515 | | | 101 | | | 34 & 195 | | 617 | | | |
| | 26-Sep | 1722 | | | | 69 | | | | 101 | 101 | | | | 34 | | | | | 617 | 101 | | |
| | 27-Sep | 1722 | | | | 69 | | 2067 | 69 | | | | 410 | | 3285 | | 34 | | | 167 | | | |
| | 28-Sep | | | 1722 | | 69 | | | 746 | | 101 | | | | 34 | 3285 & 101 | 542 | | 34 & 195 | 167 | | 101 | 48 |
| | 29-Sep | 1722 | | 6856 | | | | 2067 | 101 | | 101 | | | | 101 | | 542 | | 34 & 195 | 167 | | | 48 |
| | 30-Sep | 1722 | | 38 | | | | 2067 | | 1722 | 38 & 101 | | | | 34 | 101 | 457 | | | 34 | | 101 | 48 |
| | 01-Oct | 1722 | | 1722 | | | | 2067 | | | 93 & 101 | | | | | 10 | 457 | | | 167 | | | |
| | 02-Oct | 1722 | | | | 6984 | | 2067 | | 38 | 93 | 515 | | | 34 | 10 | 457 | | 195 | 34 & 195 | | 398 | 195 |
| | 03-Oct | 1722 | | | | 6984 | | 2067 | | 38 | 93 | 542 | | | 34 | 3285 | 457 | | 515 | 34 | | | |
| | 04-Oct | 1722 | | | 515 | 69 | | 2067 | | | 38 | | | | | 10 | 457 | | | 34 & 195 | | | 40 |
| | 05-Oct | 1722 | | 542 | | | | 2067 | | | 101 | | | | | | | | 515 | 167 | | | 38 |
| | 06-Oct | | | | | | | 2067 | | | 93 | | | | | 457 | 457 | | | 167 | | | 38 |
| | 07-Oct | 1722 | | | | | | 2067 | | | | | | | | 69 | 457 | | 195 | 34 | | | 38 |
| | 08-Oct | 1722 | | 515 | | | | 2067 | | | | | | | | | 457 | | 38 | 34 & 195 | | | 38 |
| 09-Oct | | | | | | | | | | | | | | | | | | | 34 | | | | |

Figure S2 – Phylogeny of *E. coli* isolates shown with presence of observed beta-lactamase genes. The majority of isolates carried at least one type of CTX-M, and an alarming amount of isolates also carried colistin resistance gene MCR. Some less common beta-lactamase genes were also observed (e.g. ACT, ADC). Purple = gene present, orange = gene absent.

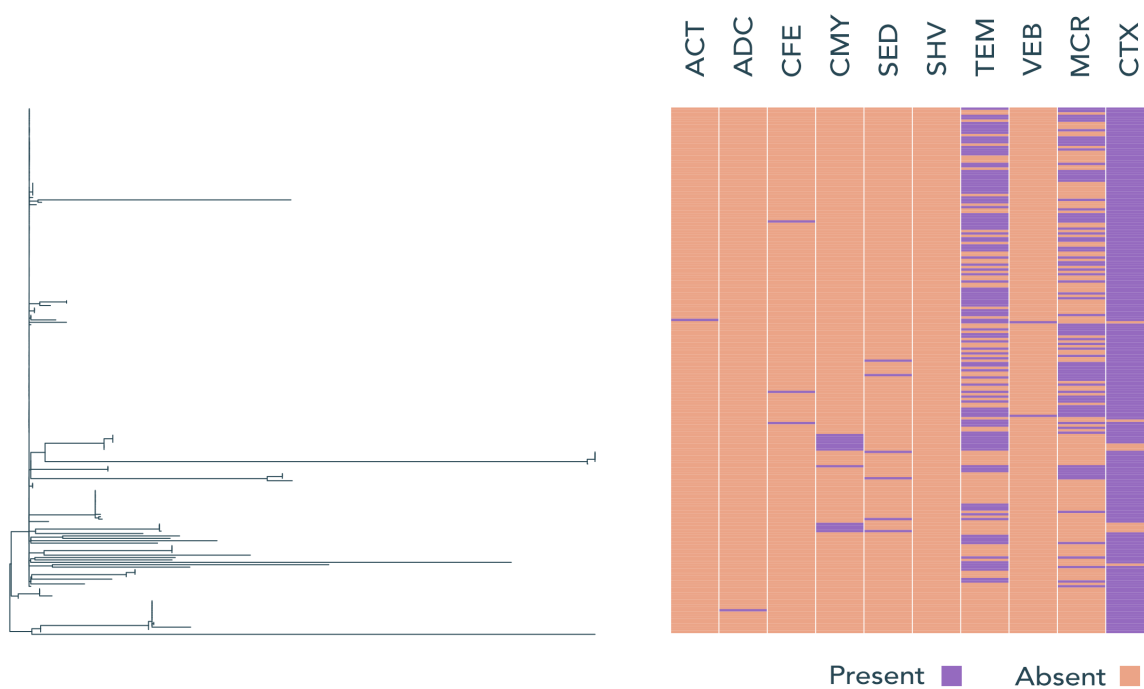


Table S2 – Total frequencies at which CTX-M subtypes were observed amongst the dataset. CTX-M-55 was the most common type observed, with other CTX-M types that are typically more dominant in other parts of the world (e.g. CTX-M-15) found to be less abundant.

| CTX-M Type | Number of Isolates with CTX-M Present |
|------------|---------------------------------------|
| CTX-M-55 | 64 |
| CTX-M-14 | 58 |
| CTX-M-159 | 57 |
| CTX-M-15 | 30 |
| CTX-M-102 | 25 |
| CTX-M-40 | 2 |
| CTX-M-63 | 2 |
| CTX-M-164 | 1 |
| CTX-M-181 | 1 |
| CTX-M-196 | 1 |
| CTX-M-32 | 1 |
| CTX-M-65 | 1 |
| CTX-M-76 | 1 |
| CTX-M-77 | 1 |