Extended-Spectrum Beta-Lactamase-Producing *Escherichia coli* (ESBL-*E. coli*) causing bacteriuria in a San Francisco Public Healthcare System, 2014-2020

**ESBL-*E. coli* is a serious public health threat** (CDC 2019)

- Drivers: prior hospitalization and antibiotic use; other factors?
- Increase in ESBL-*E. coli* in overall SF public health care system in prior study

**Hypothesis:** Increase in ESBL-*E. coli* in various clinical settings

**Methods:** Electronic health records from outpatients, inpatients, skilled nursing facility residents; Multivariate logistic regressions

**Results**

Increase in bacteriuria caused by ESBL-*E. coli* per semester

- 0.91% community-onset
- 1.08% in outpatients
- 1.14% in inpatients
- 1.20% in skilled nursing facility residents
- 2.38% healthcare-onset/associated

**Risk factors for bacteriuria caused by ESBL-*E. coli***

**Community-onset:**

- >65 years OR[CI] = 2.01 [1.21, 3.35]
- Male gender OR[CI] = 2.35 [1.73, 3.19]
- Latinx race/ethnicity OR[CI] = 1.60 [1.01, 2.51]

**Healthcare-onset/associated:**

- Male gender OR[CI] = 1.80 [1.07, 3.03]

**Conclusion**

While ESBL-*E. coli* increased in both community-onset and healthcare-onset/associated bacteriuria, there were differences in risk factors suggesting differences in exposures

E. coli icon by Léa Lortal from the Noun Project