Coulee IQIC 101 Asymptomatic Bacteriuria (ASB) Final Report

June 2023

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| Prevalence of ASB at Coulee (32 of 95) = 34% | Treatment Rate of ASB at Coulee (27 of 32) = 84% |



**Number of total cases submitted from Coulee: 142**

**Number of total cases included from Coulee: 122**

**Number of total positive urine cultures from Coulee: 95**

**Number of total positive urine cultures in overall population: 672**

**Prevalence of ASB in overall cohort (264 of 672) = 39%**

**Treatment rate of ASB in overall cohort (210 of 264) = 80%**

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| Antibiotic Selection, n (%) | IV | PO |
|  | Total cases, n=142 | ASB, n=27 | Total cases, n=142 | ASB, n=27 |
| Antibiotic 1 | Ceftriaxone, 17 (12) | Ceftriaxone, 3 (11) | Nitrofurantoin, 53 (37) | Nitrofurantoin, 12 (44) |
| Antibiotic 2 | Pip/tazo, 2 (1) | Cefazolin, 2 (7) | TMP/SMX, 23 (16) | TMP/SMX, 6 (22) |
| Antibiotic 3 | Amp/sul, 1 (0.7) | Pip/tazo, 1 (4) | Ciprofloxacin, 6 (4) | Amoxicillin, Amox/clav, cefdinir, cephalexin, fosfomycin, levofloxacin, 1 (4) |
| Antibiotic 4 | Levofloxacin, 1 (0.7) | --- | Cephalexin, 6 (4) |
| Antibiotic 5 | --- | --- | Amox/Clav, 4 (3) |

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| Antibiotic Duration | Total cases, n=142 | ASB, n=27 |
| Total Antibiotic Duration; median (IQR) | 7 days (5-8.5) | 7 days (7-10) |
| Number of Cases Receiving >7 days; n (%) | 40 (28) | 13 (48) |

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| Characteristics; n (%) | Total cases, n=142 | Treated ASB, n=27 |
| Setting |  |  |
| Ambulatory care clinic | 70 (49) | 10 (37) |
| ED, then admitted | 6 (4) | 1 (4) |
| ED, then discharged | 55 (39) | 12 (44) |
| Inpatient | 7 (5) | 2 (7) |
| Other | 4 (3) | 2 (7) |
| From reflex test | 114 (80) | 21 (78) |
| Men | 28 (20) | 12 (44) |
| Age, median y | 67 | 76 |
| Chronic catheter use | 6 (4) | 4 (15) |
| Chronic urinary retention | 5 (4) | 1 (4) |
| Altered mental status | 2 (1) | 1 () |

**Key and Definitions**:

* Positive urine culture: Any growth on culture.
* Prevalence of ASB: A positive urine culture without any documented signs or symptoms attributable to urinary tract infection per National Hospital Safety Network (NHSN) and Infectious Diseases Society of America (IDSA) Guidelines.
	+ Signs or symptoms of UTI includes:
		- Fever (>38°C)
		- Suprapubic tenderness
		- Costovertebral angle pain or tenderness
		- Urinary urgency
		- Urinary frequency
		- Dysuria
		- Hematuria
		- AMS PLUS a systemic sign of possible infection
			* Peripheral leukocytosis >10 000 cells/mm3
			* Systolic blood pressure <90 mm Hg
* Treatment rate of ASB: antibiotic treatment for ASB

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Percentage of patients treated for UTI who actually had ASB, overtime (number of patients treated for ASB / number of patients treated for UTI + ASB)

* Baseline: 26%
* Peri-Intervention: 41%



**Goal:** lower is better

**Why use?** You can lower the number by either reducing unnecessary urine cultures (**diagnostic stewardship**) or reducing antibiotic treatment when unnecessary cultures are obtained (**antibiotic stewardship**)