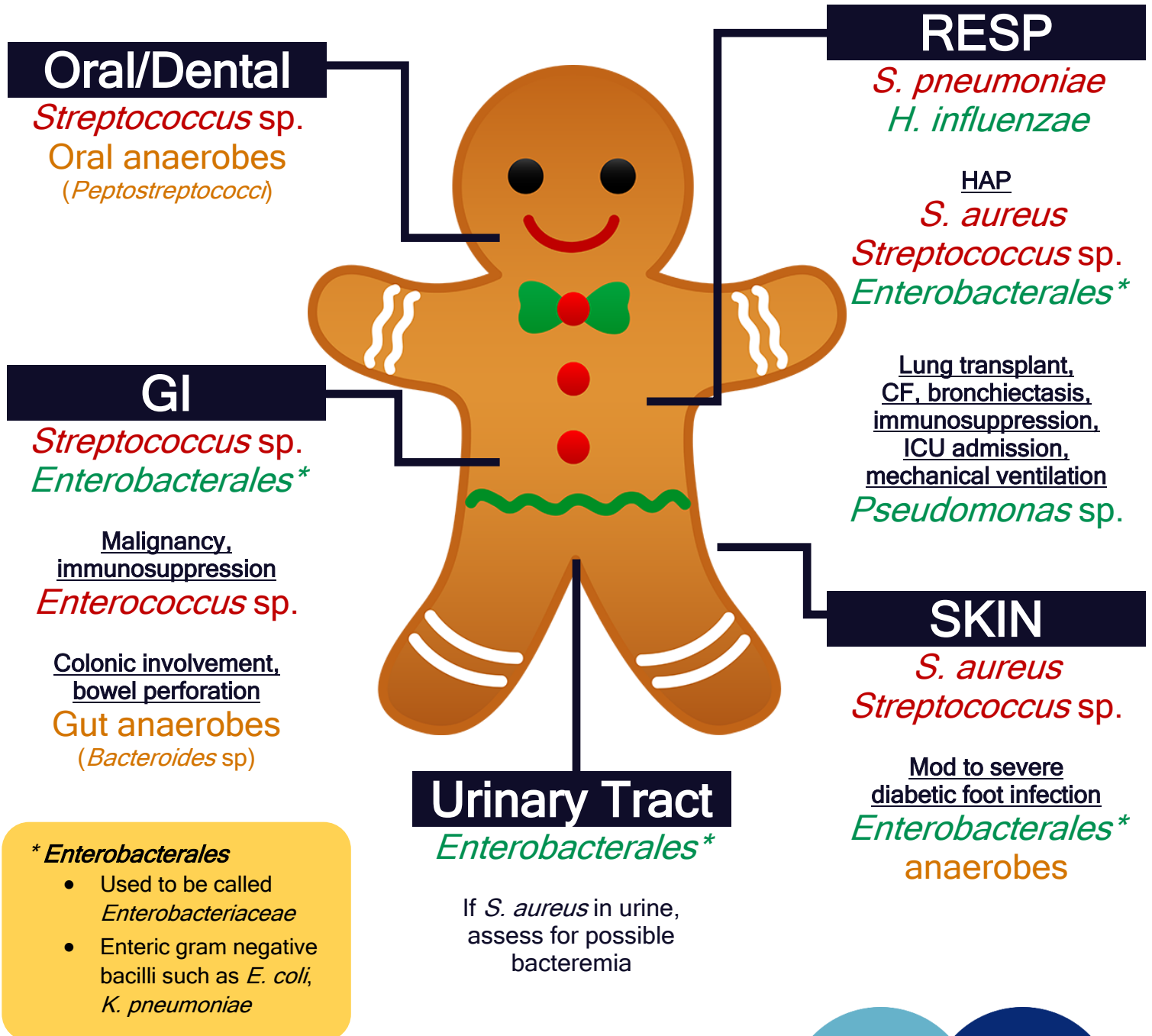


# Common Bacterial Pathogens

to consider for adult general medicine patients



\* **Enterobacterales**

- Used to be called *Enterobacteriaceae*
- Enteric gram negative bacilli such as *E. coli*, *K. pneumoniae*

Question? Call 604-417-8921

# Antibiotic Spectrum: Gram positive

Reference: PHC Firstline, Sanford,  
VCH CoC antibiogram 2022



Empiric Therapy	Group A, B Strep	S. pneumoniae	Viridans group Strep	MSSA	MRSA	E. faecalis
amoxicillin, ampicillin	YES	YES	YES	NO	NO	YES
cefazolin, cephalexin	YES	YES	YES	YES	NO	NO
ceftriaxone	YES	YES	YES	not first line*	NO	NO
amoxi-clav	YES	YES	YES	YES	NO	YES
pip-tazo	YES	YES	YES	YES	NO	YES
meropenem	YES	YES	YES	YES	NO	not first line
doxycycline	NO	NO	74%	YES	YES	NO
clindamycin	GAS 79%	?	81%	82%	72%	NO
	GBS 46%					
TMP-SMX	?	NO	NO	YES	73%	NO
moxifloxacin	YES	YES	YES	YES	49%	NO
vancomycin IV	YES	YES	YES	YES	YES	YES

\*Ceftriaxone does not have reliable activity for severe MSSA infections; cefazolin/doxacillin should be used if appropriate

Question? Call 604-417-8921

# Antibiotic Spectrum: Gram negative Anaerobes

Reference: PHC Firstline, Sanford,  
VCH CoC antibiogram 2022 (gram neg)  
& antibiogram 2020 (anaerobes)



Empiric therapy	H. influenzae (antibiogram data for Haemophilus spp.)	E. coli	K. pneumoniae	P. mirabilis	Pseudo-monas	Pepto-streptococci	Bacteroides
amoxicillin, ampicillin	82%	65%	NO	81%	NO	YES	NO
cefazolin, cephalexin	NO	88%	88%	61%	NO	YES	NO
ceftriaxone	100%	92%	89%	98%	NO	YES	NO
amoxi-clav	97%	88%	100%	98%	NO	YES	YES
pip-tazo	YES	98%	98%	100%	82%	YES	YES
meropenem	YES	99%	99%	100%	99%	YES	YES
TMP-SMX	81%	84%	90%	86%	NO	NO	NO
ciprofloxacin	100%	79%	90%	87%	91%	NO	NO
moxifloxacin	not first line, expected activity, no antibiogram data				NO	YES	YES

Refer to Coastal ASPIRES Flyer October 2022 for overview of ESBL and AmpC treatment

Question? Call 604-417-8921

## Classification (simplified list)

### Gram positive cocci

- Streptococci
  - Beta-hemolytic
    - *S. pyogenes* (Group A)
    - *S. agalactiae* (Group B)
    - *S. dysgalactiae* (Group C, G)
  - Alpha-hemolytic
    - *S. pneumoniae*
    - Viridans group Streptococcus
      - *S. mitis* group, *S. mutans* group, *S. salivarius* group, *S. anginosus* group
- Staphylococci
  - *S. aureus* (MSSA, MRSA)
- Enterococci
  - *E. faecalis*, *E. faecium*

### Gram negative coccobacilli

- *H. influenzae*

### Gram negative bacilli

- Enterobacterale
  - **AmpC**: *Serratia* sp., *Providencia* sp., *Proteus vulgaris*, *Citrobacter freundii*, *Enterobacter cloacae*, *Klebsiella aerogenes*, *Hafnia* sp., *Aeromonas* sp., *Morganella* sp.
  - **ESBL**: *E. coli*, *K. pneumoniae*, *K. oxytoca*, *Proteus mirabilis*

Question? Call 604-417-8921