

West Lincoln Memorial Hospital Antibigram Cumulative Data for 2020

Before using this antibiogram you should know:

- 1) The antibiogram is used to direct initial empiric therapy only. Antibiotics need to be reassessed based on susceptibility testing and patient clinical status.
- 2) Data presented in the antibiogram should be considered in combination with an individual patient's risk factors for resistant organisms, clinical syndrome and hospital epidemiology.
- 3) The antibiogram provides the percentage of isolates which are **susceptible** to an antibiotic. For life-threatening infections, it is reasonable to choose an antibiotic regimen with the lowest resistance rate.
- 4) A shaded box indicates that the particular antibiotic/microorganism combinations are not recommended.
- 5) Calculation of results was based on the first isolate per patient for the year 2020. Duplicate isolates and surveillance isolates were removed.

For further information, contact the Microbiology Laboratory, Hamilton Regional Laboratory Medicine Program

**All specimens excluding surveillance for 2020 – West Lincoln Memorial Hospital
% Susceptible**

Gram Negative Organisms	No. of Isolates	Ampicillin	Ceftriaxone	Ceftazidime	Piperacillin-Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Amikacin	TMP/SMX	Ciprofloxacin
<i>E. coli</i>	289	58	93		96	100	100	92	93		79	74
<i>Klebsiella pneumoniae</i>	53	0	89		98	100	100	98	92		85	79
<i>Proteus mirabilis</i>	#20	85	100		100	100	100	100	100		95	95
<i>Pseudomonas aeruginosa</i>	34			91	97		91	94	97			82

Fewer than 30 isolates may not be reliable for guiding empiric treatment decisions and cannot be used to statistically compare results to other years.

Gram Positive Organisms	No. of Isolates	Ampicillin	Cloxacillin	Cefazolin	Clindamycin	Erythromycin	TMP/SMX	Ciprofloxacin	Tetracycline	Rifampin (not to be used as monotherapy)	Vancomycin
<i>Staphylococcus aureus (includes MSSA and MRSA)</i>	88		74	74	See MSSA and MRSA						
<i>Methicillin Sensitive S. aureus (MSSA)</i>	67		100		87	84	100	93	99	100	100
<i>Methicillin resistant S.aureus(MRSA)</i>	#23		0		61	17	100	4	96	100	100
<i>Enterococcus spp</i>	64	83									97

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ANTIBIOGRAM FOR 2020 BY SPECIMEN TYPE - West Lincoln Memorial Hospital

1) Urine Culture Specimens: % Susceptible

Organism	Number of Isolates	Ampicillin	Cefazolin (Urinary)	Ceftriaxone	Ceftazidime	Piperacillin-Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Amikacin	Nitrofurantoin (for urine only)	TMP/SMX	Ciprofloxacin
<i>E. coli</i>	277	58	90	93		96	100	100	92	94		95	78	73
<i>Klebsiella pneumoniae</i>	52	0	88	88		98	100	100	98	92		37	85	81
<i>Pseudomonas aeruginosa</i>	#25				92	100		92	96	96				84

Fewer than 30 isolates may not be reliable for guiding empiric treatment decisions and cannot be used to statistically compare results to other years.

Organism	Number of Isolates	Ampicillin	Ciprofloxacin	Nitrofurantoin (for urine only)	Tetracycline	Vancomycin
<i>Enterococcus spp</i>	56	82	56	86	20	96

Intrinsic resistance for selected organisms

Organism	Antibiotics that are INEFFECTIVE ***DO NOT USE***
<i>Enterococcus</i>	Cephalosporins, Cloxacillin, Clindamycin, TMP/SMX Ciprofloxacin and Tetracycline should be used only for urinary source
SPICE organisms (<i>Serratia</i> , indole positive <i>Proteus</i> , <i>Providencia</i> , <i>Pantoeae</i> , <i>Morganella</i> , <i>Citrobacter freundii</i> complex, <i>Enterobacter spp</i>)	Penicillins, cephalosporins, broad spectrum penicillins and β -lactam/ β -lactamase inhibitor combinations (eg. piperacillin-tazobactam) are not recommended as SPICE organisms contain an inducible chromosomal <i>AmpC</i> β -lactamase.
<i>Salmonella spp</i>	Aminoglycosides, 1 st and 2 nd generation cephalosporins
Methicillin resistant <i>S. aureus</i> (MRSA)	Penicillins, cephalosporins, broad spectrum penicillins and β -lactam/ β -lactamase inhibitor combinations, carbapenems (e.g. meropenem)

Helpful Web Sites

Centers for Disease Control and Prevention

<http://www.cdc.gov/drugresistance>

<http://www.cdc.gov/getsmart>

Infectious Diseases Society of America

<http://www.idsociety.org>

Choosing Wisely Canada

<http://www.choosingwiselycanada.org>

Association of Medical Microbiologists and

<http://www.ammi.ca>

Infectious Diseases Canada (AMMI)

Johns Hopkins Infectious Diseases

<http://www.hopkinsguides.com>

AidsInfo (US Dept of Health and Human Services)

<http://www.aidsinfo.nih.gov/>