

Predominant bacteria of the skin?	-staphylococci -cornyacteria
Predominant bacteria of the conjunctiva?	Sparse: - G(+) cocci -G(-) rods
Predominant bacteria of the teeth?	-streptococci -lactobacilli
Predominant bacteria of the mucous membranes of the oral cavity?	-streptococci -lactic acid bacteria
Predominant bacteria of the nares (nasal membranes)?	-staphylococci -cornyacteria

Predominant bacteria of the pharynx (throat)?	-streptococci -neisseria -G(-) rods and cocci
Predominant bacteria of the lower respiratory tract?	None
Predominant bacteria of the stomach?	-helicobacter pylori (up to 50%)
Predominant bacteria of the small intestine?	-Lactics -enterics -enterococci -bifidobacteria
Predominant bacteria of the colon?	-bacteroids -Lactics -enterics -enterococci -clostridia

<p>Predominant bacteria of the anterior urethra?</p>	<p>Sparse: - staphylococci - corny bacteria - enterics</p>
<p>Predominant bacteria of the vagina?</p>	<p>-lactic acid bacteria during child-bearing years -mixed when not in child bearing years</p>
<p>Hyaluronidase 1. Bacteria involved 2. Activity</p>	<p>1. Streptococci, staphylococci, and clostridia 2. Degrades hyaluronic acid of CT</p>
<p>Collagenases 1. Bacteria involved 2. Activity</p>	<p>1. Clostridium species 2. Dissolves collagen framework of muscles</p>
<p>Neuraminidase 1. Bacteria involved 2. Activity</p>	<p>1. Vibrio cholera and Shigella dysenteria 2. Degrades neuraminic acid of intestinal mucosa</p>

<p>Coagulase</p> <ol style="list-style-type: none">1. Bacteria involved2. Activity	<ol style="list-style-type: none">1. Staph aureus2. Converts fibrinogen to fibrin causing clotting
<p>Kinases</p> <ol style="list-style-type: none">1. Bacteria involved2. Activity	<ol style="list-style-type: none">1. Staphylococci and streptococci2. Converts plasminogen to plasma which digests fibrin (breaks down clots)
<p>Leukocidin</p> <ol style="list-style-type: none">1. Bacteria involved2. Activity	<ol style="list-style-type: none">1. Staph aureus2. Disrupts neutrophil membranes and causes discharge of lysosomal granules
<p>Streptolysin</p> <ol style="list-style-type: none">1. Bacteria involved2. Activity	<ol style="list-style-type: none">1. Streptococcus pyogenes2. Repels phagocytes and disrupts phagocyte membrane and causes discharge of lysosomal granules
<p>Hemolysin</p> <ol style="list-style-type: none">1. Bacteria involved2. Activity	<ol style="list-style-type: none">1. Streptococci, staphylococci, and clostridia2. Phospholipases or lecithinases that destroy RBCs (and other cells) by lysis

Lecithinases
1. Bacteria involved
2. Activity

1. Clostridium perfringens
2. Destroy lecithin in cell membrane

Phospholipases
1. Bacteria involved
2. Activity

1. Clostridium perfringens
2. Destroy phospholipids in cell membrane

Anthrax EF
1. Bacteria involved
2. Activity

1. Bacillus anthracis
2. One component (EF) is an adenylate cyclase which causes increased levels of intracellular cyclic AMP

Pertussis AC
1. Bacteria involved
2. Activity

1. Bordetella pertussis
2. One toxin component is an adenylate cyclase that acts locally producing an increase in intracellular cyclic AMP

Major virulence factors and their actions/diseases produced by streptococcus pyogenes?

1. M protein- resistance to phagocytosis
2. DNase B- cleaves DNA
3. Pyrogenic (erythrogenic) toxin- causes **scarlet fever rash
4. Streptolysin O and S- lysis of RBCs and WBCs
5. Streptokinase- dissolves fibrin in blood clots
6. Hyaluronidase- breaks down hyaluronic acid
7. Exotoxin A (SPE A)- super antigen. *streptococcal toxic shock syndrome
8. Exotoxin B (SPE B)- super antigen. Rapidly destroys tissue

Major virulence factors and their actions/diseases produced by Staph aureus?

1. Protein A- inhibits compliment fixation by binding to the Fc portion of IgG
2. Coagulase- clots blood
3. Staphylokinase- dissolves blood clots
4. Hyaluronidase (spreading factor)- breaks down hyaluronic acid
5. Beta-lactamase (penicillinase)- inactivates penicillin
6. Enterotoxin- causes **food poisoning
7. Exfoliatin (toxin)- causes **scalded skin syndrome
8. TSST (toxic shock syndrome toxin)- causes ***"toxic shock" syndrome

What are the toxins and the disease they cause associated with staphylococcus aureus?

1. Enterotoxin- food poisoning
2. Exfoliatin- scalded skin syndrome
3. TSST- toxic shock syndrome

What are the superantigens and their action/diseases associated with streptococcus pyogenes?

1. Exotoxin A (SPE A)- streptococcal toxic shock syndrome
2. Exotoxin B (SPE B)- rapidly destroys tissue

Major virulence factors and their actions/diseases produced by clostridium botulinum?

Botulinum neurotoxin
-most potent toxin known to man)
- causes muscle and nerve paralysis and **botulism

Major virulence factors and their actions/diseases produced by clostridium perfringens?

Potent *exotoxin: alpha-toxin (a lecithinase)
- **gas gangrene
-destroys integrity of cell membrane
-breaks down fibrous tissue

<p>Major virulence factors and their actions/diseases produced by clostridium tetani?</p>	<p>*Neurotoxin: tetanus toxin (tetanospasm) -**tetanus (lockjaw) -interferes with motor neurons</p>
<p>Major virulence factors and their actions/diseases produced by cornybacterium diphthereriae?</p>	<p>Diphtheria toxin -**diphtheria -blocks elongation factor-2 during translation, inhibiting protein synthesis</p>
<p>Major virulence factors and their actions/diseases produced by Shigella species?</p>	<p>Exotoxins and endotoxins -**enterocolitis -**bacterial dysentery (shigellosis)</p>
<p>Enteric G(-) rods, facultative anaerobes</p>	<ol style="list-style-type: none"> 1. E. coli 2. Pseudomonas aeruginosa 3. Proteus 4. Salmonella 5. Shigella 6. Vibrio cholera 7. Helicobacter pylori 8. Bacteroides sp
<p>G(-) anaerobic cocci</p>	<p>Veilonella</p>

G(-) aerobic rods and cocci

1. Pseudomonas
2. Wolinella
3. Bordetella
4. Brucella
5. Neisseria

G(-) rod aerobic helical/vibroid

1. Campylobacter
2. Helicobacter
3. Spirillum

G(-) rods, facultative anaerobes

1. Acrinobacillus
2. Eikinella
3. E. Coli
4. Haemophilus
5. Klebsiella
6. Proteus
7. Salmonella
8. Shigella
9. Vibrio

G(-) anaerobic straight, curved,
and helical

1. Bacteroides
2. Fusobacterium
3. Porphyromonas
4. Prevotella
5. Wolinella

G(+) cocci

1. Staphylococcus
2. Streptococcus
3. Enterococcus
4. Peptostreptococcus

G(+) spore-forming rods and cocci	<ol style="list-style-type: none">1. Bacillus2. Clostridium
Regular, non-spore-forming G(+) rods	<ol style="list-style-type: none">1. Lactobacillus2. Listeria
Irregular, non-spore-forming G(+) rods	<ol style="list-style-type: none">1. Actinomyces2. Corynebacterium3. Eubacterium
Acid-fast bacteria	<ol style="list-style-type: none">1. Mycobacteria2. Nocardia
Spirochetes	<ol style="list-style-type: none">1. Treponema2. Borrelia3. Leptospira

Chlamydias and rickettsias

1. Rickettsia
2. Chlamydia
3. Coxiella

Mycoplasmas (cell wall-less)

1. Mycoplasma
2. Spiroplasma
3. Ureaplasma

Actinomycetes

1. Nocardia
2. Streptomyces
3. Rhodococcus

Only up to card 45

Finish for cards 46, 53, 56, 59