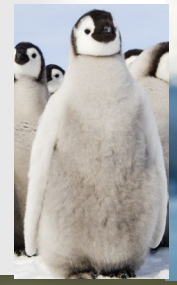
Welcome

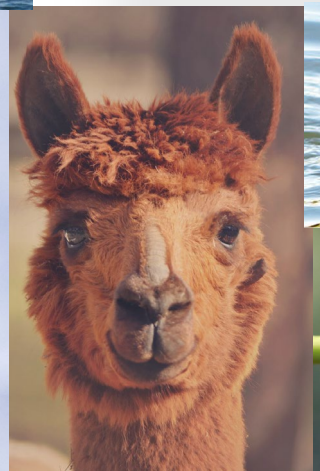
BEFORE WE BEGIN, ANSWER IN THE CHAT

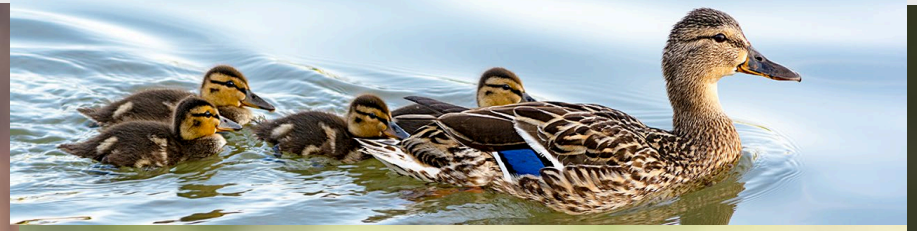
What is your spirit animal and why?

INSTRUCTION FOR CONTACT HOUR

- Your display name MUST match your evaluation name for CEU credit. If it does not, type your name and facility in the chat.
- Enjoy the entire program.
- Complete the post-evaluation by **July 25, 2025, 5:00 PM** (available on the last slide)
- Certificate will be emailed to you by **August 15, 2025.**







San Diego Skilled Nursing Facility Infection Prevention Collaborative

Grow - Collaborate - Succeed

Coordinated by the County of San Diego
Healthcare-Associated Infections (HAI) Program

Reminders

Recording is on!

PHS.HAI.HHSA@sdcounty.ca.gov

Keep your lines muted

Participate in the polls and chat

Use the chat box for questions

Slides will be emailed

For internal use only. Not for distribution.

Type into the chat your:

- Name
- Title
- Facility

Healthcare Associated Infections Program

Land Acknowledgement

Public Health Services would like to begin by acknowledging the Indigenous Peoples of all the lands that we are on today. While we are meeting on a virtual platform, I would like to take a moment to acknowledge the importance of the lands, which we each call home. We respectfully acknowledge that we are on the traditional territory of the Kumeyaay. We offer our gratitude to the First Nations for their care for, and teachings about, our earth and our relations. May we honor those teachings.

Healthcare Associated Infections Program

Agenda

- **Welcome**
- **General Updates**
- **Announcements**
- **Featured Topic:** “Bridging Microbiology and Prevention”
- **Next Collaborative**

Healthcare Associated Infections Program

SNF IP
Email List

CAHAN San Diego

California HEALTH ALERT NETWORK

To: CAHAN San Diego Participants
Date: July 3, 2025
From: Public Health Services

Health Advisory: Increased Invasive Meningococcal Disease (IMD), San Diego County

Key Messages

- As of June 30, 2025, there have been seven cases of Invasive Meningococcal Disease (IMD) among San Diego County residents. Between 2022-2024, the average number of IMD cases had been 3.7 cases per year.
- Providers are reminded that ciprofloxacin is no longer recommended for post-exposure prophylaxis (PEP) for close contacts of patients with IMD due to rising ciprofloxacin-resistant *Neisseria meningitidis* strains in the California.
- Providers are encouraged to request antimicrobial susceptibility testing (AST), including for ciprofloxacin, on all sterile-site isolates from IMD patients.
- Providers should report confirmed and suspect meningococcal infections immediately to the San Diego County Epidemiology Unit.
- Vaccination is recommended for all adolescents and other age groups at increased risk for infection.
- All men who have sex with men (MSM), regardless of HIV status, should receive at least one dose of meningococcal conjugate (MenACWY) vaccine. A booster dose should be considered for MSM who received MenACWY vaccine ≥ 5 years ago.

CAHAN San Diego

California HEALTH ALERT NETWORK

To: CAHAN San Diego Participants
Date: July 7, 2025
From: Public Health Services

Health Advisory: Increased West Nile Virus detection in mosquitos, San Diego County

Key Messages

- West Nile Virus (WNV) has been detected in mosquitos in the Rolando area of San Diego County. WNV activity is elevated overall in California.
- As of June 30, no human cases have been detected in the County in 2025.
- WNV should be suspected in patients presenting with acute neurologic illness (e.g. aseptic meningitis, encephalitis, acute flaccid paralysis) and/or prolonged febrile illness.
- The preferred diagnostic test is WNV IgM serum antibodies and/or cerebrospinal fluid (CSF) IgM when a lumbar puncture is performed. Testing is widely available at commercial laboratories.
- Report all cases of encephalitis and meningitis to the San Diego County Epidemiology Unit, including those pending definitive diagnosis.

Respiratory Virus Update

July 10, 2025

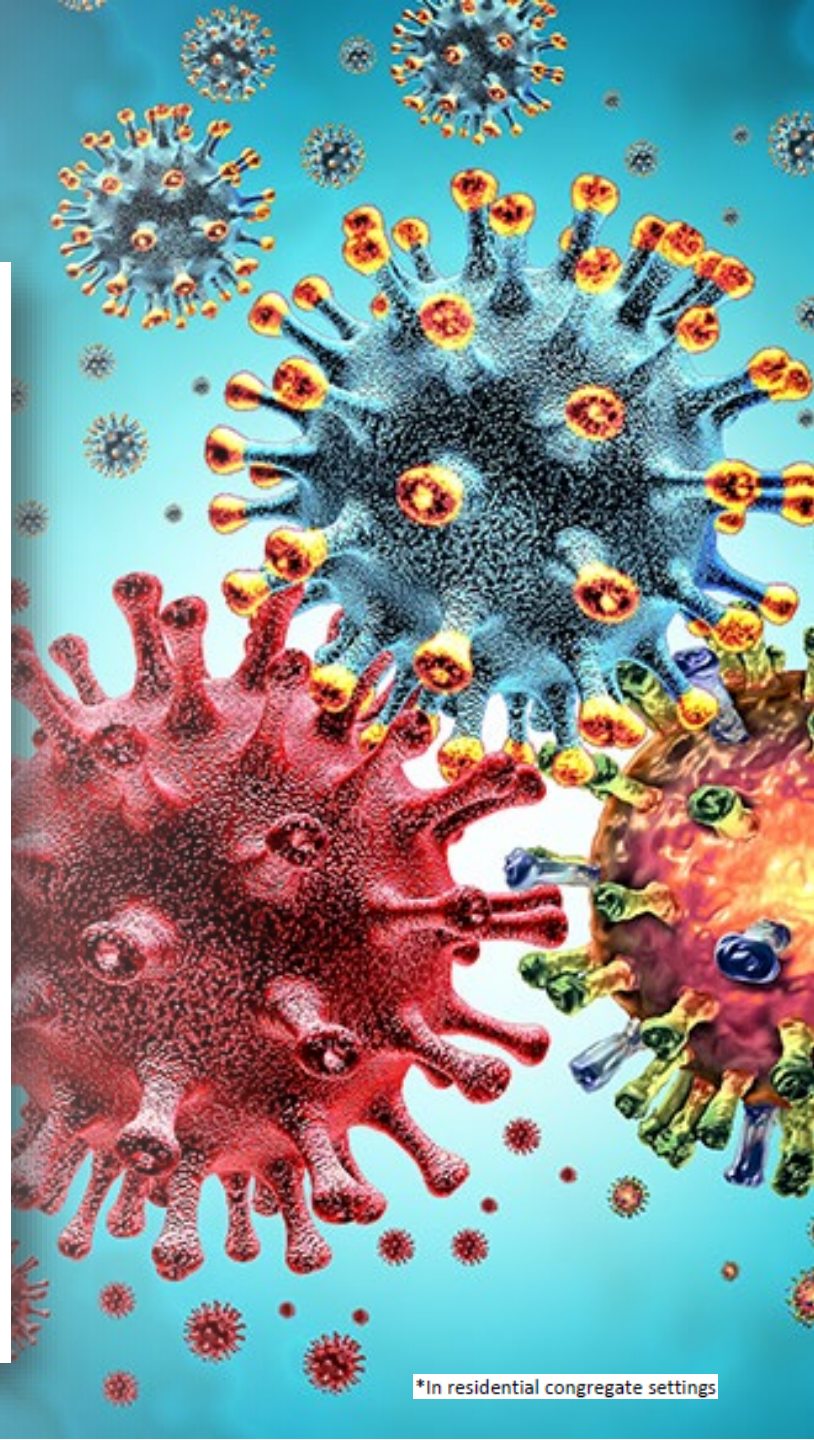
LIVE WELL SAN DIEGO

San Diego County
Respiratory Virus Surveillance Report

Prepared by Epidemiology and Immunization Services Branch
www.sdepi.org

This report will be issued monthly on the second Thursday of the month.
Weekly reporting will resume in October.

COVID-19	Influenza	RSV
Cases: 336	Cases: 58	Cases: 5
Deaths: 0	Deaths: 0	Deaths: 0
Outbreaks*: 0	Outbreaks*: 0	Outbreaks*: 0
6/29/2025 – 7/5/2025	*6/29/2025 – 7/5/2025*	*6/29/2025 – 7/5/2025*



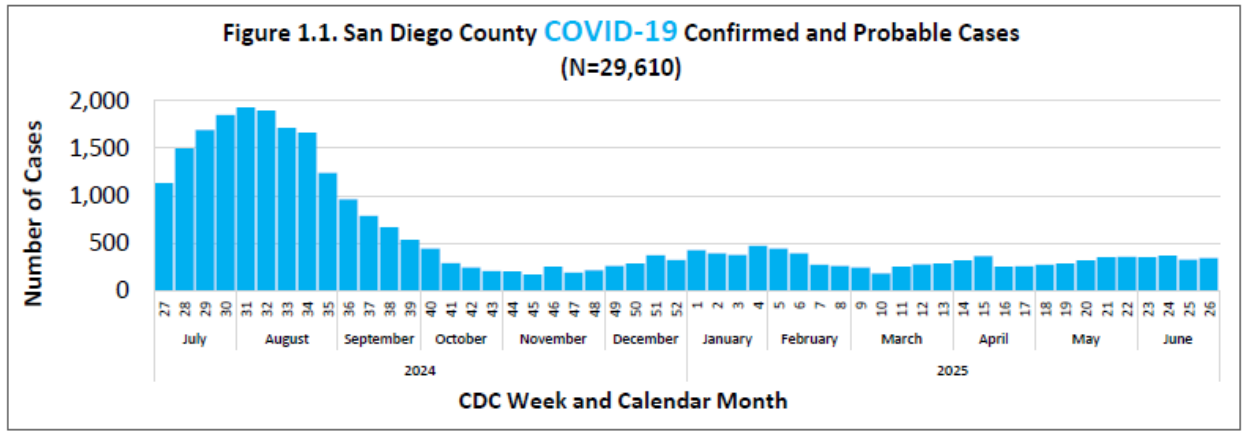
*In residential congregate settings

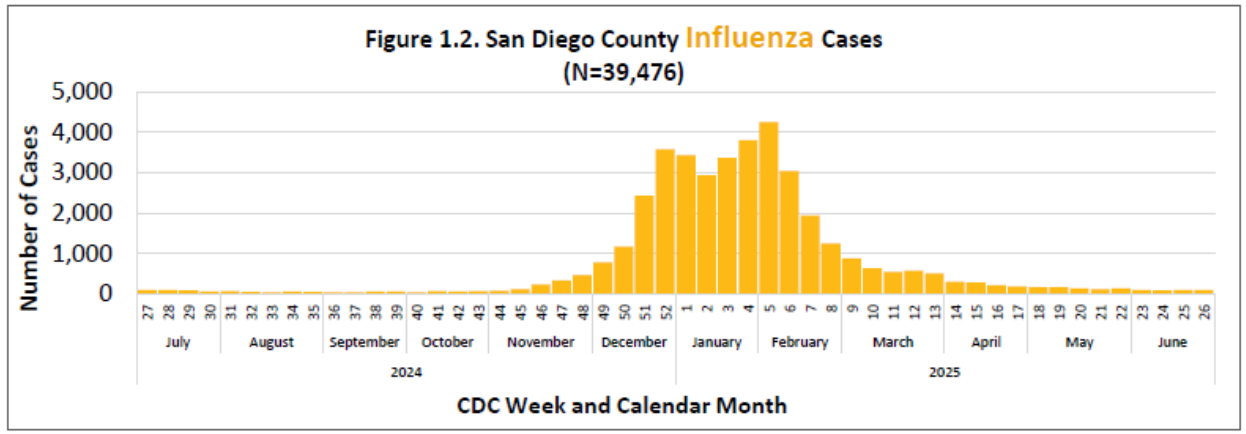
Respiratory Virus Update

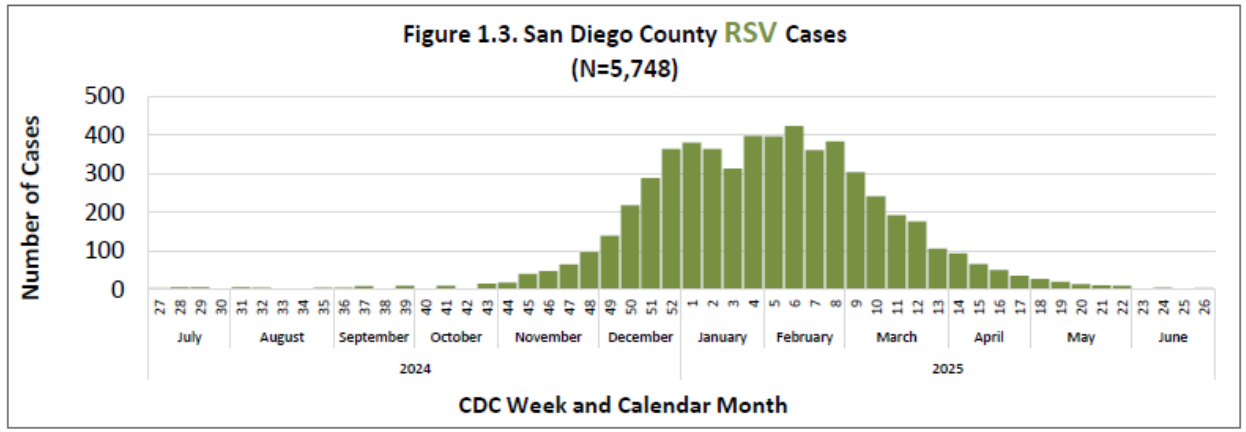
For internal use only. Not for distribution.

*Episode date is the earliest available of symptom onset date, specimen collection date, date of death, date reported. Data for the most recent week may be incomplete.

COVID-19, Influenza, and RSV Cases by CDC Episode Week,* 2024-25 Fiscal Year







*Episode date is the earliest available of symptom onset date, specimen collection date, date of death, date reported. Data for the most recent week may be incomplete.

County/CDPH Briefings

- **County LTC Sector Bi-Monthly Telebriefing:**
  - Bi-monthly 4th Thursday @ 2PM-3PM
  - Next briefing is on **7/24/25**

Healthcare Associated Infections Program

Contact Hour Instructions

Ensure	• Ensure your full name identifies you on Teams
Enjoy	• Enjoy the full presentation
Complete	• Complete the post-evaluation

Bridging Microbiology and Prevention

July 23, 2025 11:00 am - 12:00 pm

Presenter

Jennifer West, BSN, RN, PHN
Public Health Nurse
County of San Diego
Healthcare-Associated Infections Program

COUNTY OF SAN DIEGO HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL SAN DIEGO

Healthcare Associated Infections Program

Bridging Microbiology & Infection Prevention

Jennifer West, BSN, RN, PHN
Public Health Nurse
County of San Diego HAI Program

www.sdhai.org
phs.hai.hhsa@sdcounty.ca.gov

COUNTY OF SAN DIEGO HEALTH AND HUMAN SERVICES AGENCY | LIVE WELL SAN DIEGO

Healthcare Associated Infections Program

Objectives

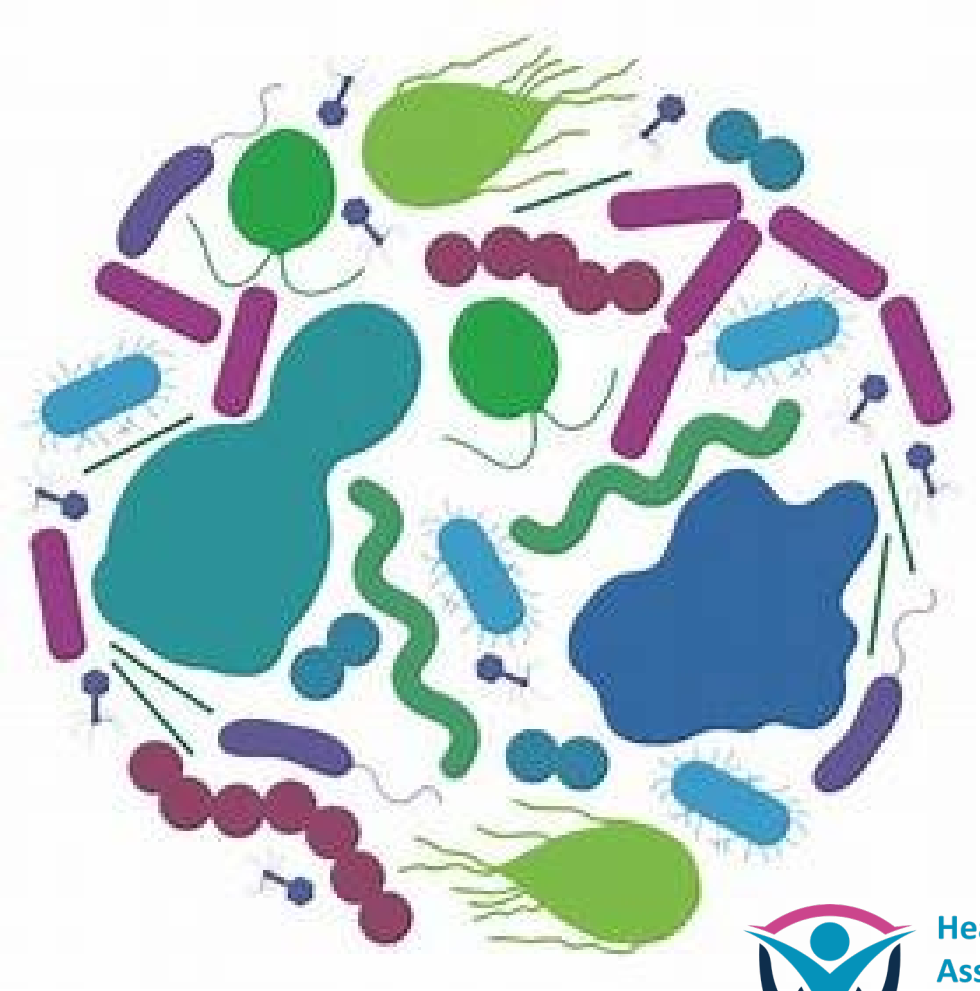
The learner will be able to…

- ✓Describe the role of the clinical microbiology in infection prevention
- ✓Describe laboratory tests for infectious pathogens commonly seen in skilled nursing facilities
- ✓Identify three concerning organisms commonly diagnosed in skilled nursing facilities

Healthcare Associated Infections Program

Background

- Microbiology is the study of microorganisms including bacteria, fungi, viruses.
- Pathogens are infectious organisms that cause disease.
- Microbiology helps the IP to develop and implement infection control measures.

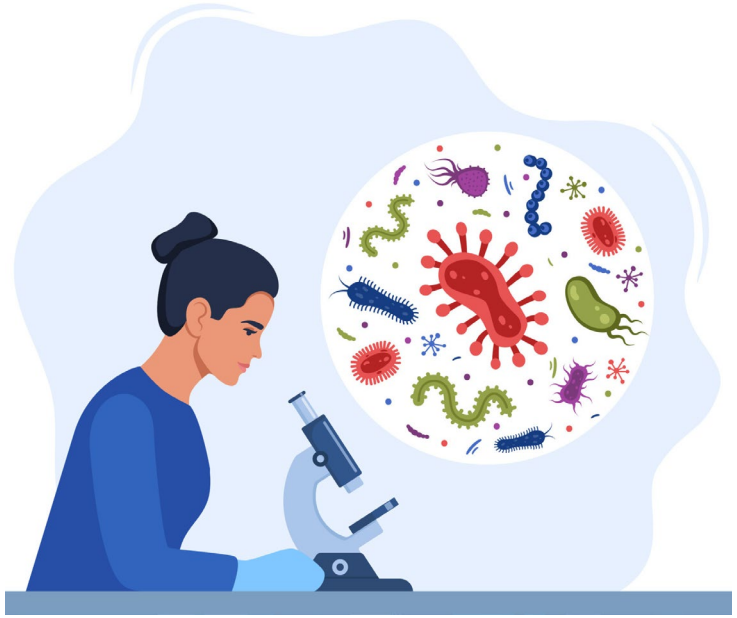


Healthcare Associated Infections Program

Microbiology & Infection Prevention

Microbiology has two important functions:

1. **Clinical:**
   - Identify pathogens and their susceptibility to treatment
   - Ex. antibiotics for an infected wound



2. **Epidemiological:**
   - Identify pathogens causing disease or outbreak in a population
   - Ex. number of resistant organisms in a facility

Healthcare Associated Infections Program

Importance of Microbiology Laboratory Results

Determine transmission-based precaution

Determine facility's ability to implement Enhanced Barrier Precautions

Reinforce the need for adherence monitoring

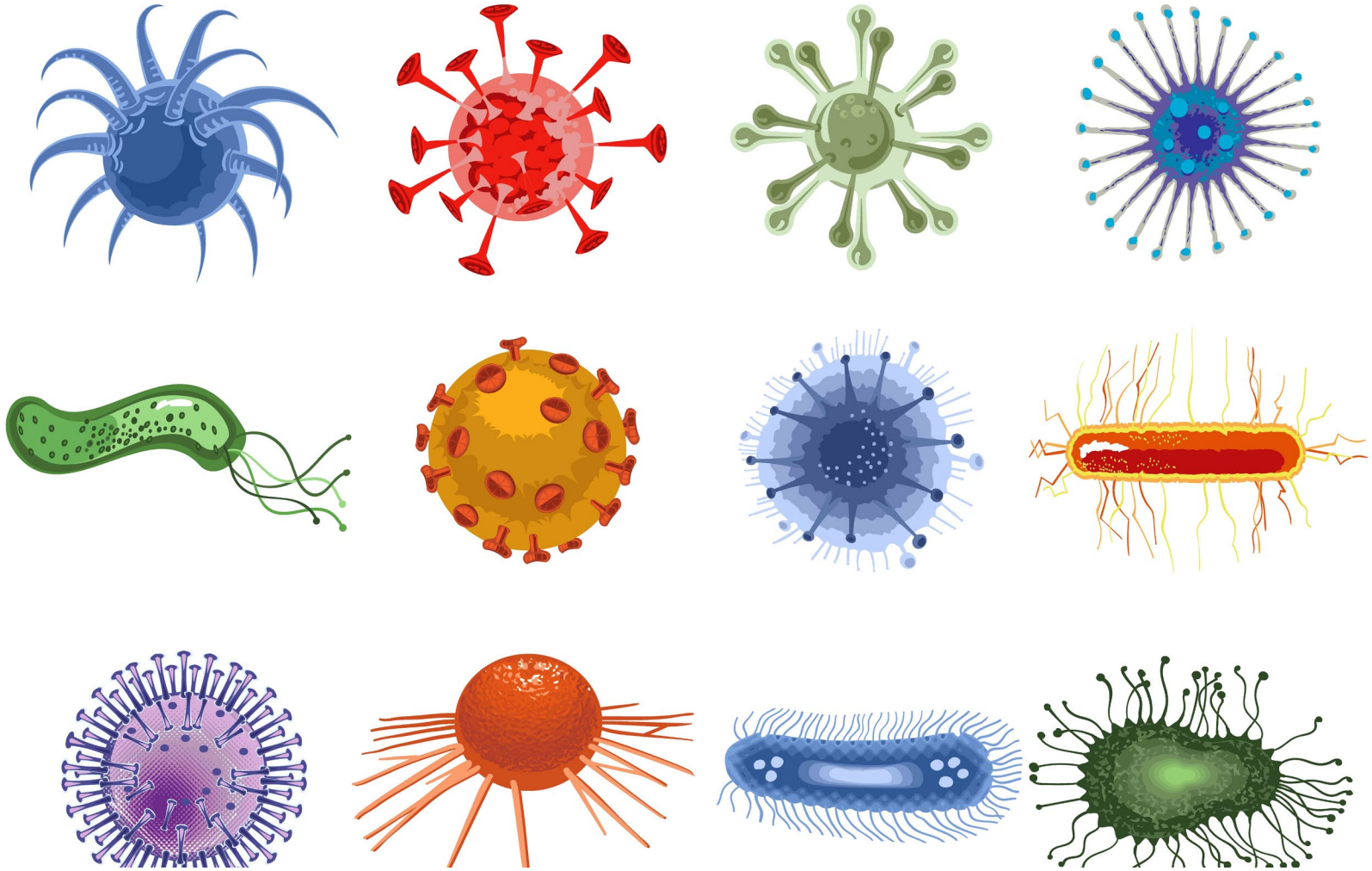
Healthcare Associated Infections Program

Importance of Microbiology Lab Results (cont.)

- Assists with cohorting residents
- Disinfectant use
- Antimicrobial stewardship

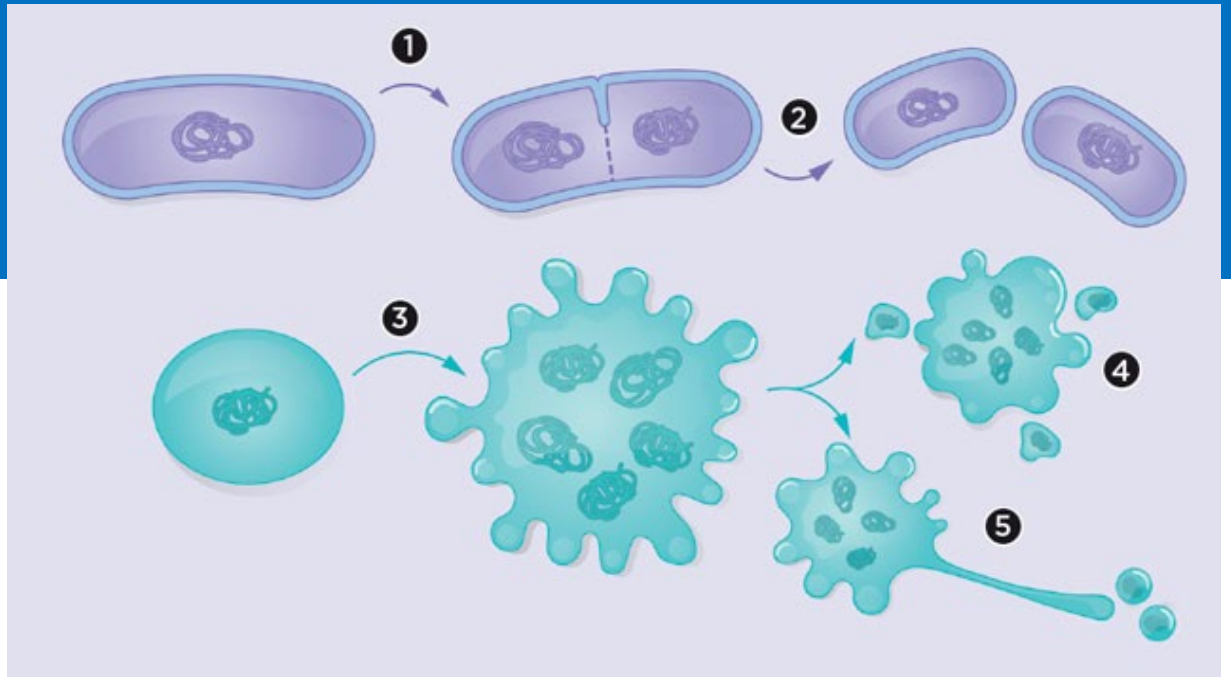
Healthcare Associated Infections Program

Microorganisms

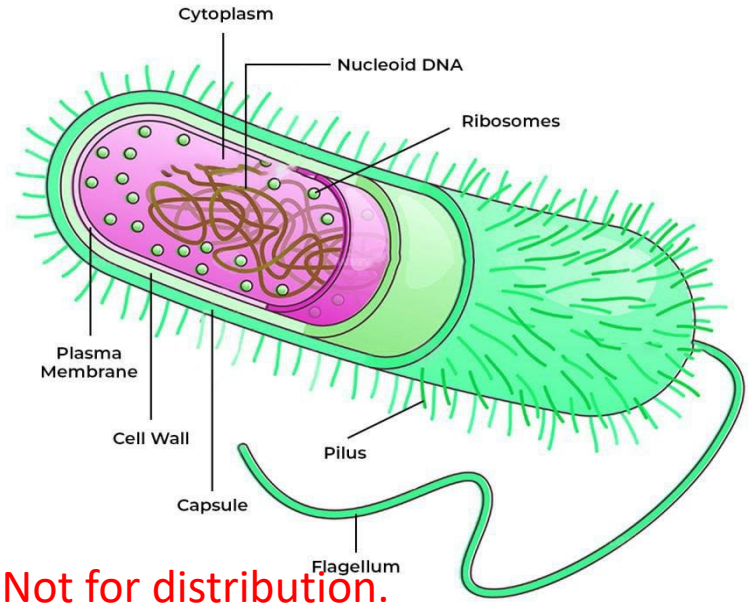


Healthcare Associated Infections Program

Bacteria

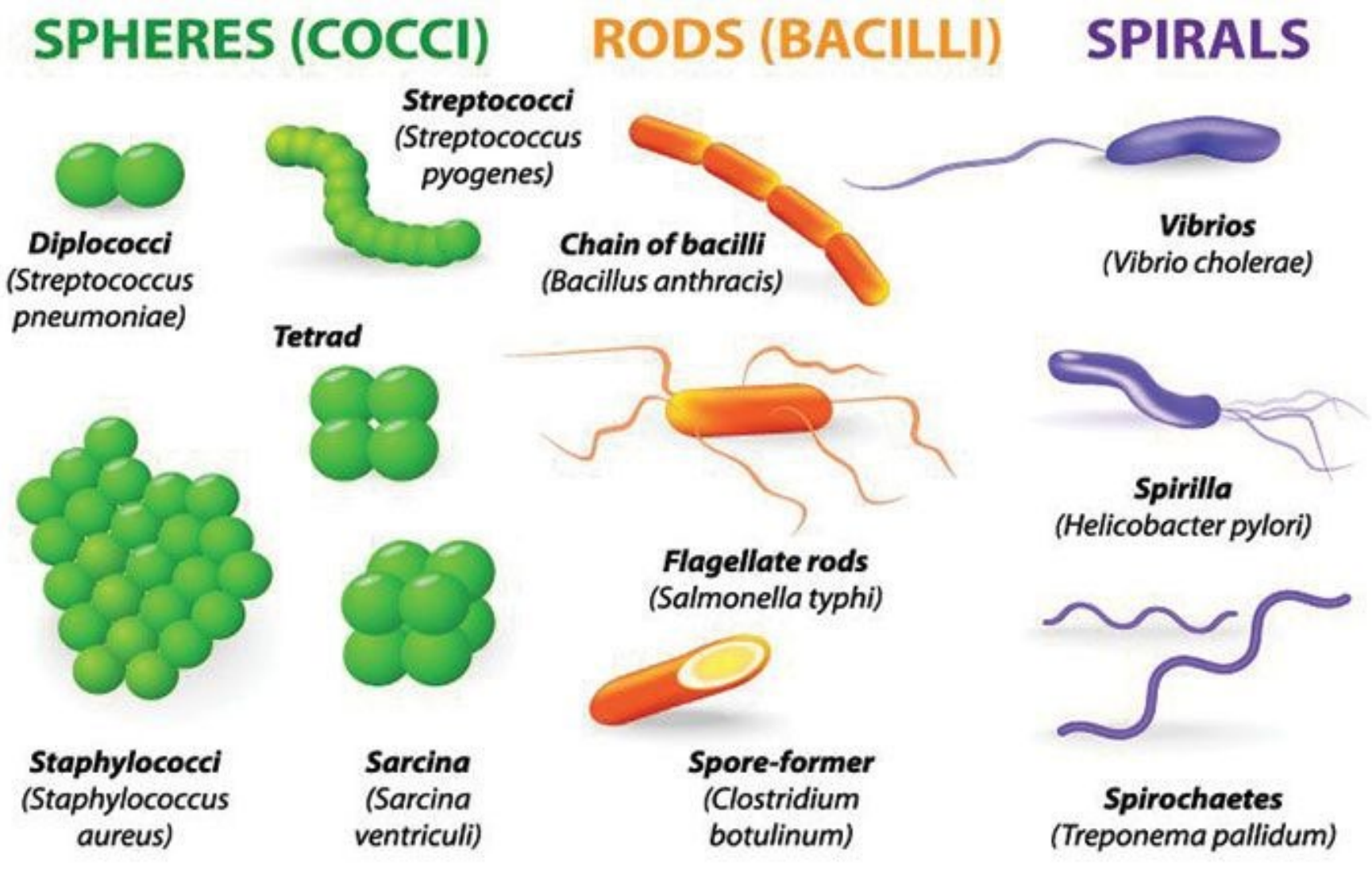


- Single-celled
- Cannot be seen with the naked eye
- Replicate by splitting apart
- May or may not cause disease
- May have **thin or thick** cell walls



Healthcare Associated Infections Program

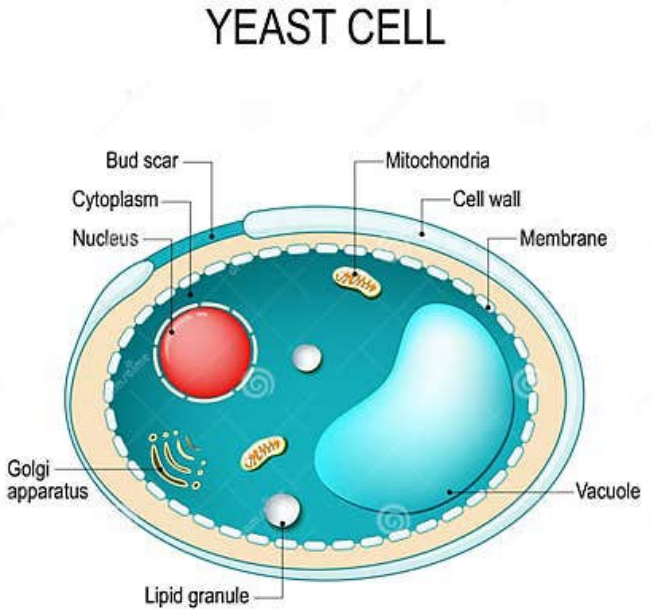
Bacterial Shapes

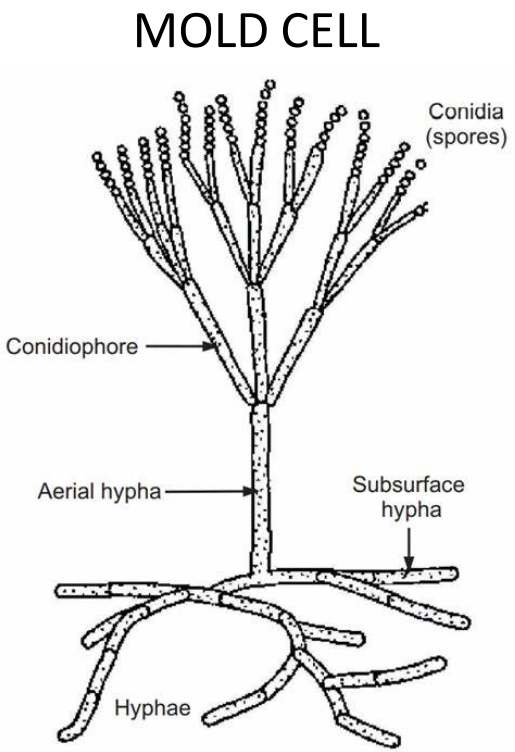


Healthcare Associated Infections Program

Fungi

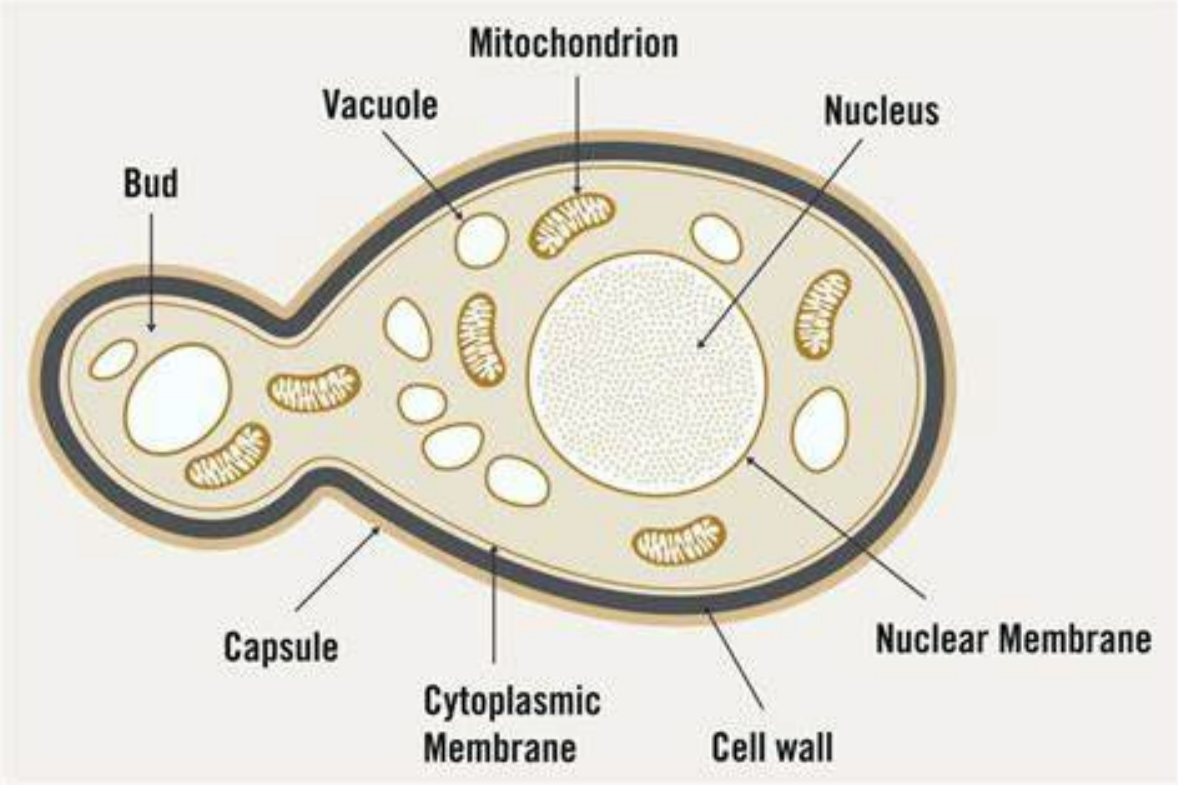
- Typically large compared to bacteria
- Tough cell wall
- Reproduce by splitting apart or budding off
- May cause infection in humans
- Divided into two groups:
  - Yeasts
  - Molds





Healthcare Associated Infections Program

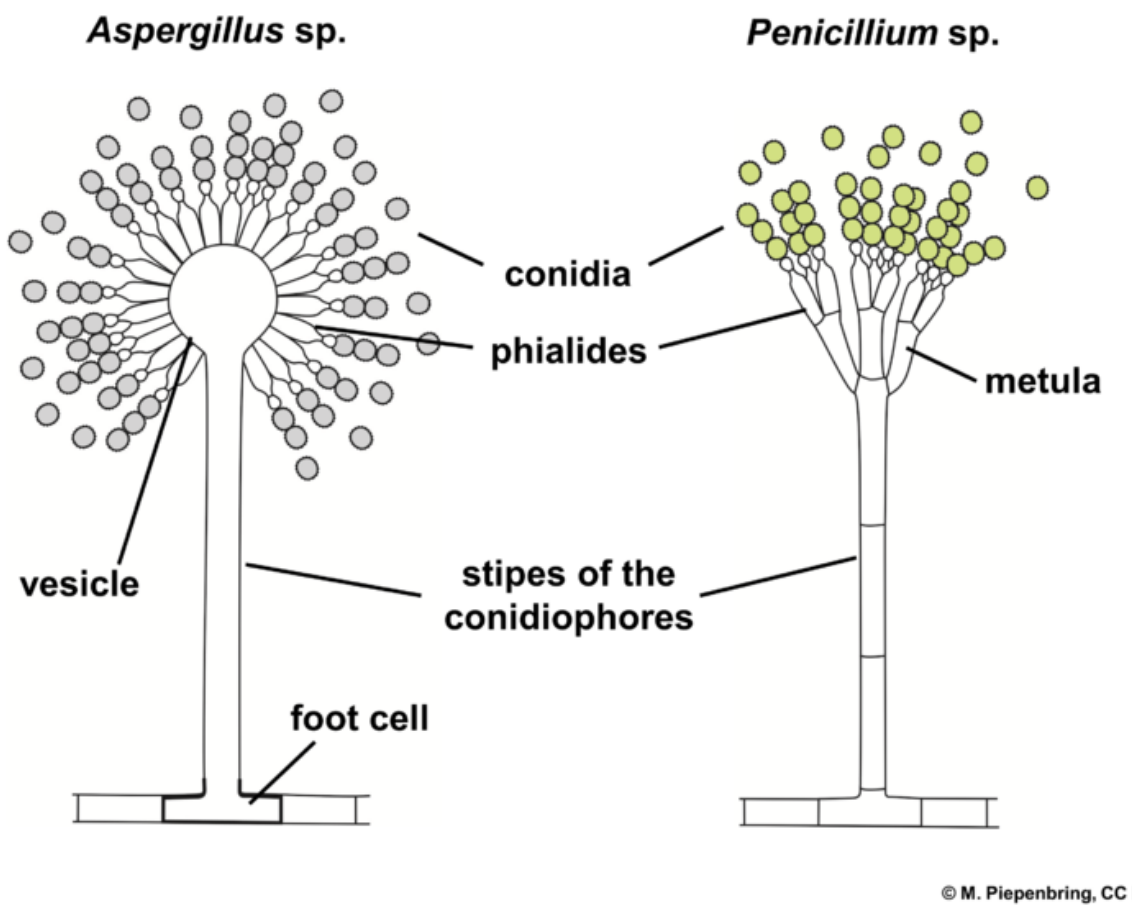
Fungi - Yeasts



- Single cell & round
- Reproduce by budding
- May cause infections on different parts of the body
- Ex. *Candida* spp., *Cryptococcus*

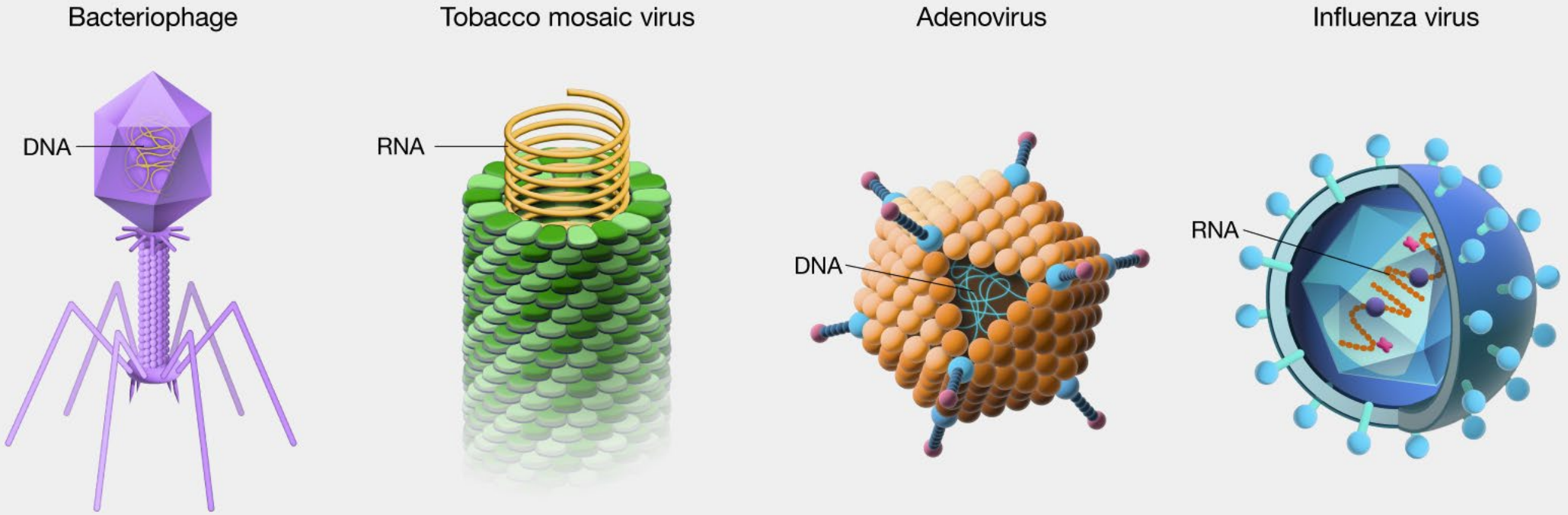
Healthcare Associated Infections Program

Fungi - Molds



- Has many cells
- Long, branching cells
- Form spores to reproduce
- Allergic reaction & respiratory issues
- Ex. *Aspergillus*

Healthcare Associated Infections Program



Viruses

- Smaller than bacteria
- Contain RNA/DNA, surrounded by protein “coat”
- Intracellular parasites
- Some use in treatment

Healthcare Associated Infections Program

Knowledge Check

Microbiology labs results help with decisions on…

a. Traffic
b. What to eat
c. Cohorting residents
d. Measuring

Healthcare Associated Infections Program

Knowledge Check - Answer

Microbiology labs results help with decisions on…

a. Traffic

b. What to eat

c. Cohorting residents

d. Measuring

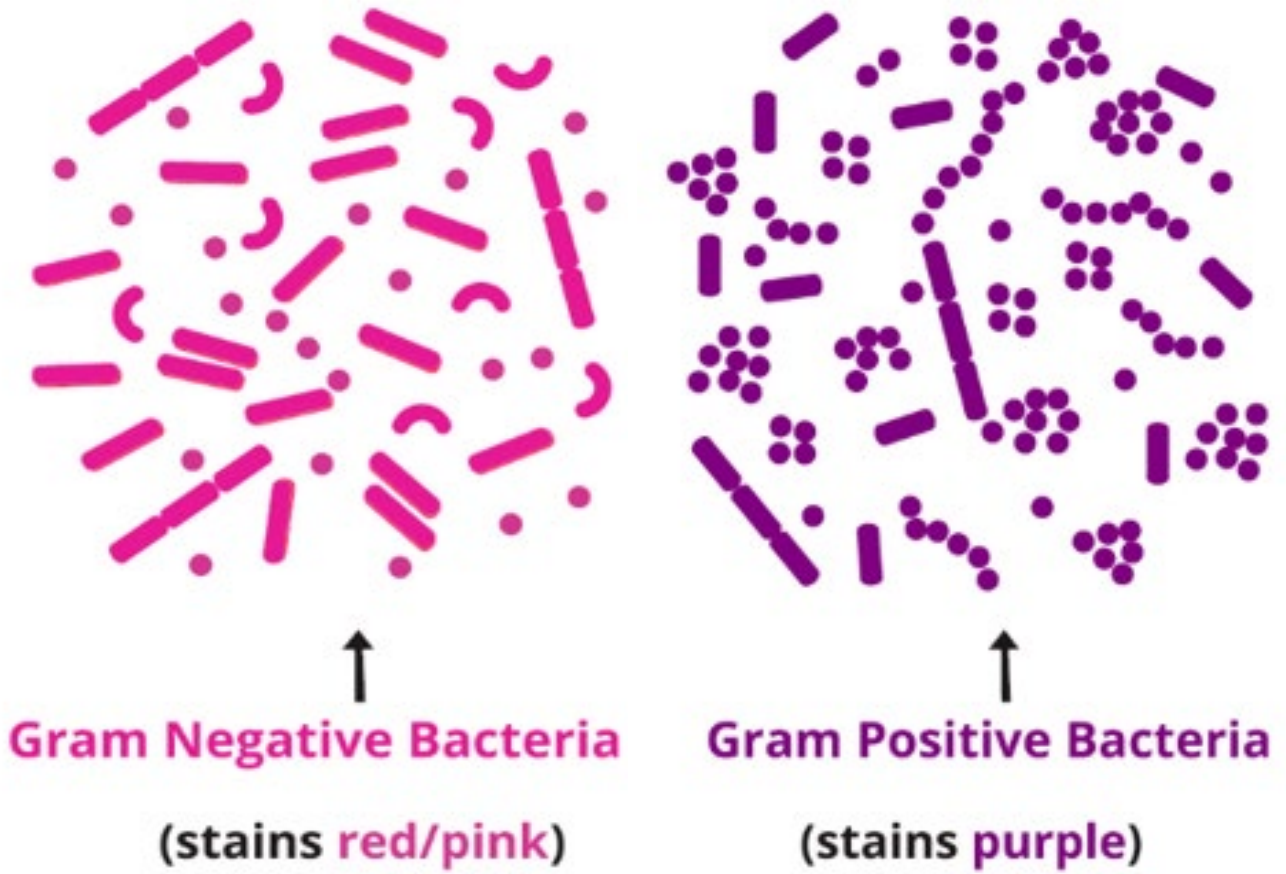
Healthcare Associated Infections Program

Common Identification Tests

Healthcare Associated Infections Program

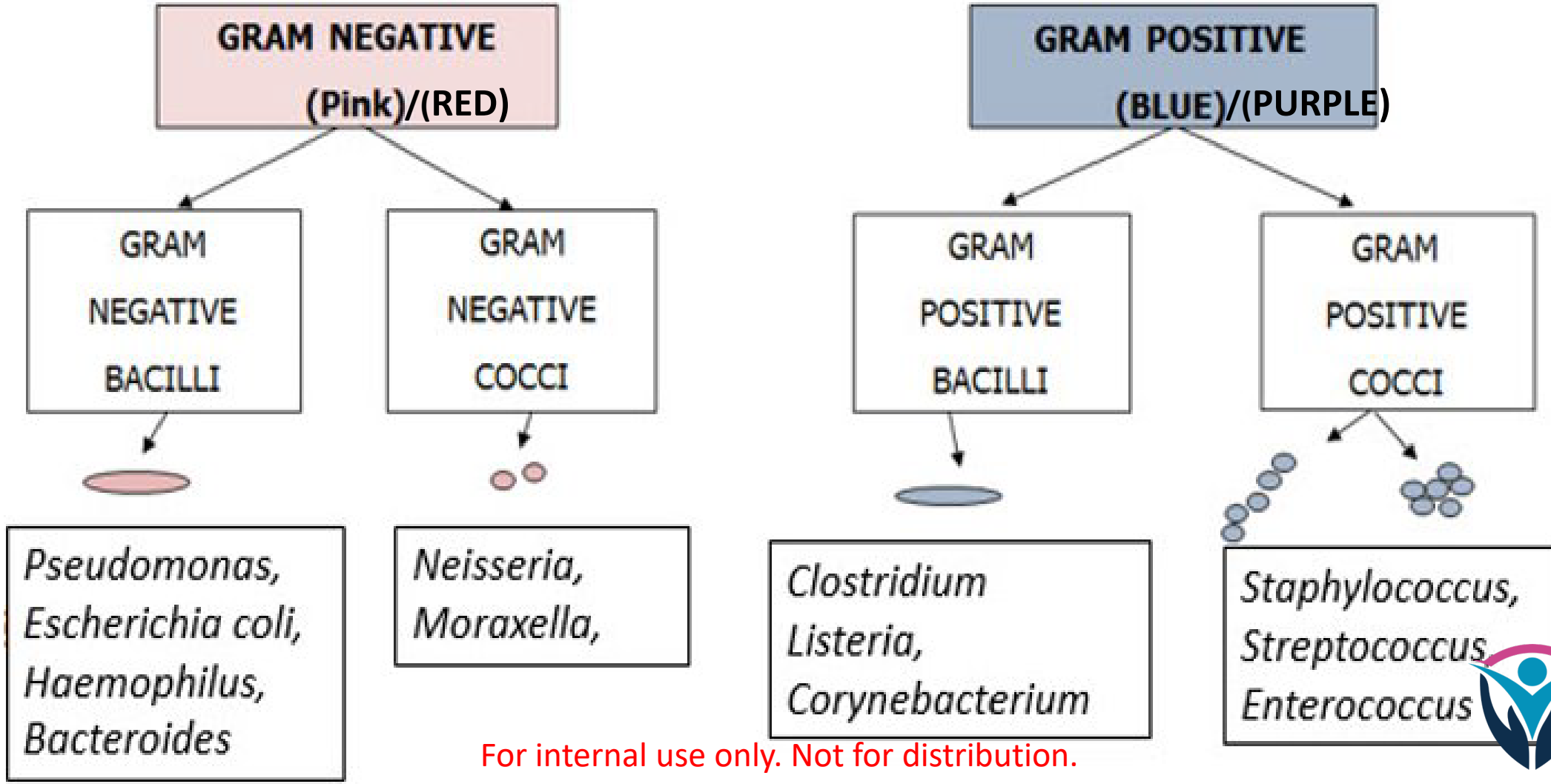
Gram Staining

- **Classifies bacteria into 2 large groups:**
  - gram-negative (-)
  - gram-positive (+)
- **Differentiates bacteria by the properties of their cell walls**
  - Thin-walled
  - Thick-walled
- Guides antibiotic therapy



Healthcare Associated Infections Program

Gram Stain Identifies Four Basic Bacteria Groups



Healthcare Associated Infections Program

Culture Testing

- Used to grow bacteria and fungi
  - Can grow a single bacterial strain
  - Can grow more than one type of bacteria
  - Can grow nothing at all
- Identifies specific genus and species
- Identifies colony forming units (CFU)

Ex. *Acinetobacter* spp.

Healthcare Associated Infections Program

Bacterial Culture and Gram Stain Sterile Container Abdomen

Status: Edited Result - FINAL Visible to patient: No (inaccessible in MyChart)

Next appt: 03/05/2025 at 11:00 AM in [redacted]

Specimen Information: Abdomen; Abscess

Specimen Comment: Abdomen

0 Result Notes

For internal use only. Not for distribution.

Component	
Gram Stain Result	Heavy red blood cells Heavy Gram positive bacilli Few Gram positive cocci Heavy polymorphonucleated white blood cells
Body Site Culture	! **Acinetobacter baumannii** **Moderate** **Identification performed by Mass Spectrometry(Maldi-ToF). This test was developed and its performance characteristics determined by [redacted] Microbiology Laboratory. It has not been cleared or approved by the U.S. Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary.** **----------** **Susceptibility testing performed by broth microdilution using a commercially prepared panel intended for research use only. This test was developed and its**

Healthcare Associated Infections Program

Knowledge Check

In a Gram stain test, a gram-negative bacteria will look:

a. The organism will look burgundy
b. The cell wall has many long-chain fatty acids
c. The organism will look pink
d. The test must be voided due to contamination

Knowledge Check - Answer

In a Gram stain test, a gram-negative bacteria will look like:

a. The organism will look burgundy
b. The cell wall has many long-chain fatty acids
c. The organism will look pink
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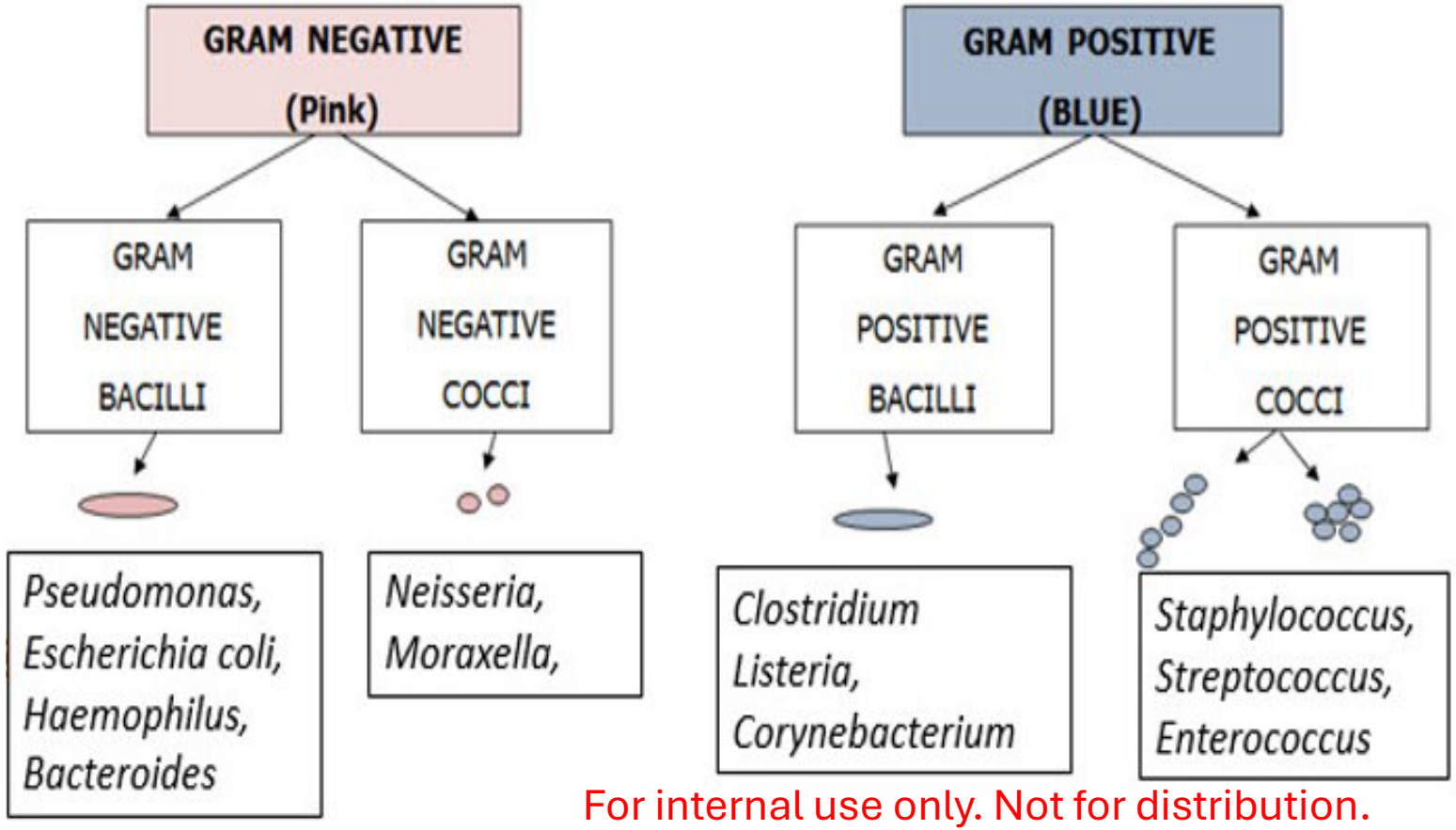
Healthcare Associated Infections Program

Knowledge Check

You received preliminary lab results that indicate a “gram-negative bacilli.” Which organism could the lab be referring to?



a. *Clostridium*

b. *Pseudomonas*

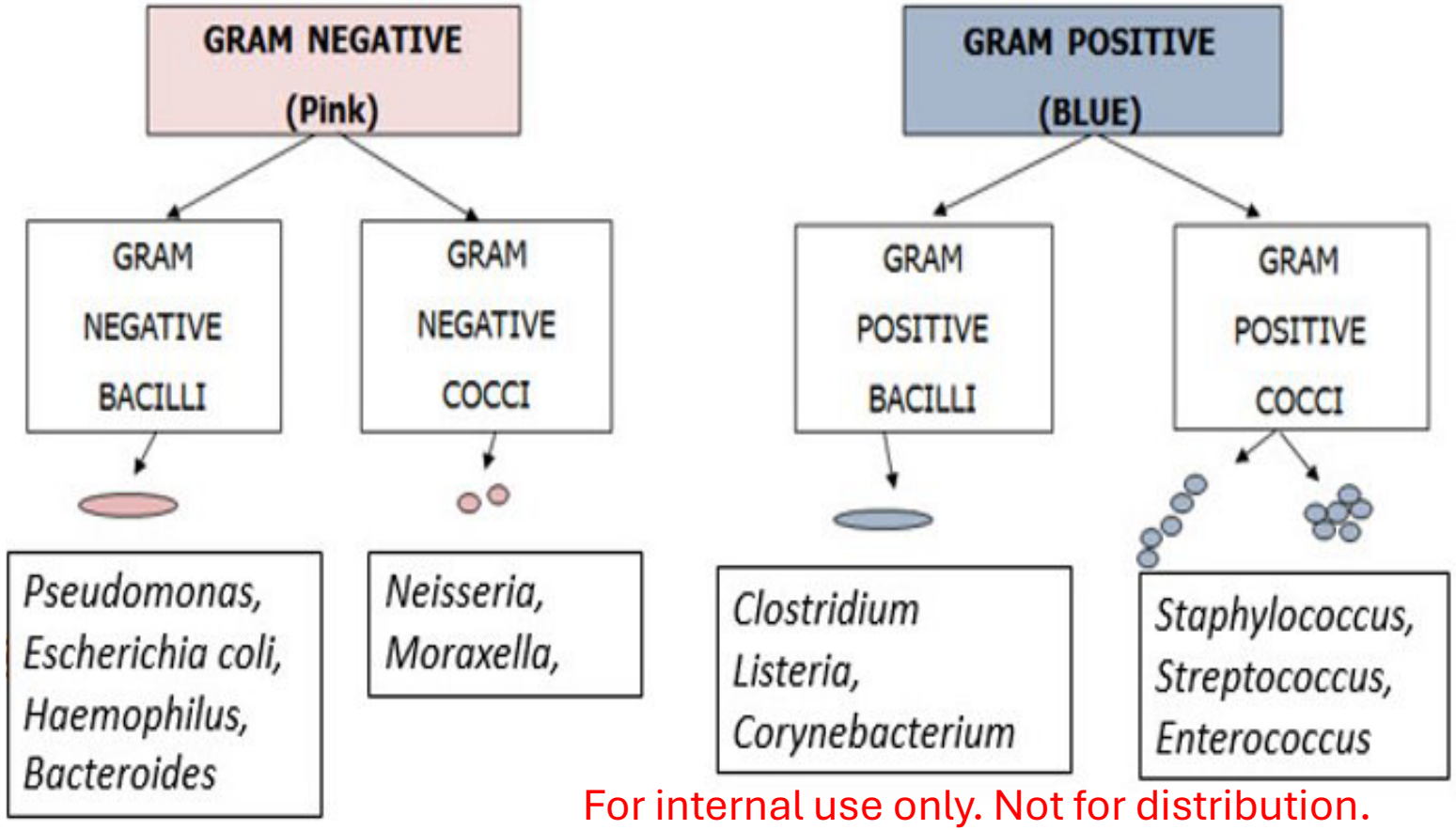
c. *Streptococcus*

d. *Neisseria*

Healthcare Associated Infections Program

Knowledge Check

You received preliminary lab results that indicate a “gram-negative bacilli.” Which organism could the lab be referring to?



a. *Clostridium*

b. *Pseudomonas*

c. *Streptococcus*

d. *Neisseria*

Healthcare Associated Infections Program

Accuracy of Lab Results

No lab test is 100% accurate 100% of the time

Many factors can affect accuracy of laboratory tests

Just ask!

Considerations for Microbiology Test Results

- Presence of an organism **does not always mean disease**
  - Residents may be **colonized with an organism**
  - Bacterial growth may confirm infection if found in normally sterile sites
- Providers must take into account
  - Other tests to determine infection (e.g., CBC)
  - Signs & symptoms of resident

Healthcare Associated Infections Program

Blood Tests: Infection Markers

Blood tests are used to evaluate overall health

Infection Marker	Significance
C-reactive protein (CRP) ↑	Indicates inflammation & severity of infection
White blood cell count (WBC) ↑	Immune response & infection presence
Procalcitonin (PCT) ↑	Differentiates bacterial from viral infections
Erythrocyte sedimentation rate (ESR) ↑	Indicates inflammation & infection, non-specific

Healthcare Associated Infections Program

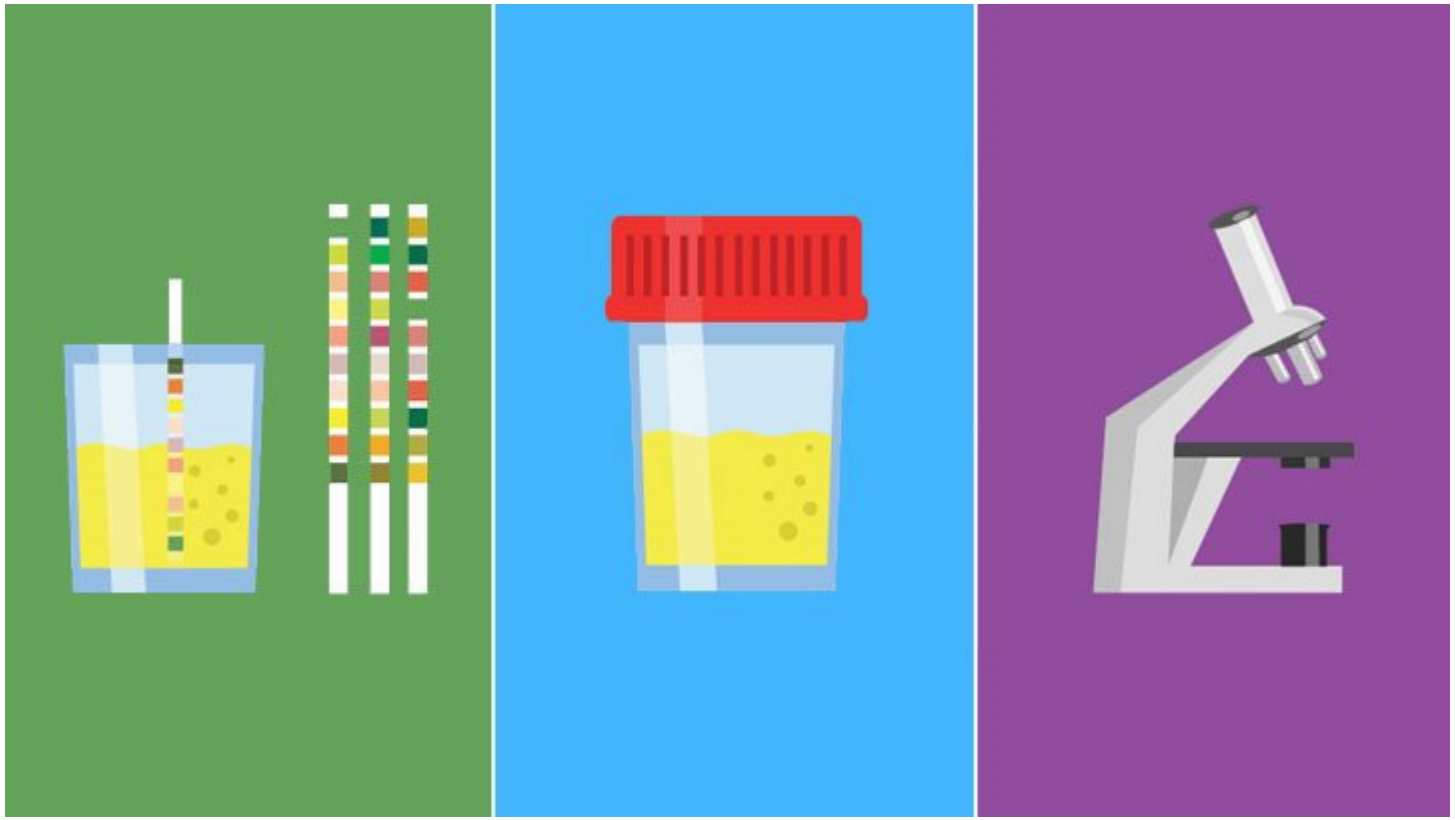
Blood Tests: Cell Counts

Cell Type	Normal Range	Increased	Decreased
White Blood Cells	4,500 to 11,000 cells/microliter	Ongoing infection	Possible Viral infection or weakened immune system
Red Blood Cells	4.5-5.5 million cells/microliter for men, 4.0-5.0 million cells/microliter for women	Dehydration, bone marrow issues	Possible cancer, bone marrow issues
Platelets	150,000-450,000 platelets/microliter	Ongoing infection	Clotting issues, bone marrow problems, cancer

Urinalysis “UA”

- Uses visual exam, microscopic exam, & dipstick methods to assess presence of disease
- Tests include:

Appearance, pH, protein, glucose, ketones, blood, WBC RBC, bacteria, etc.



- Based on findings providers may order additional tests

Healthcare Associated Infections Program

Knowledge Check

What does it mean when someone is colonized?

a. Disease has taken over
b. You can see the organism on the person
c. They have Colony Forming Units
d. The organism has become apart of a person's normal flora

Knowledge Check - Answer

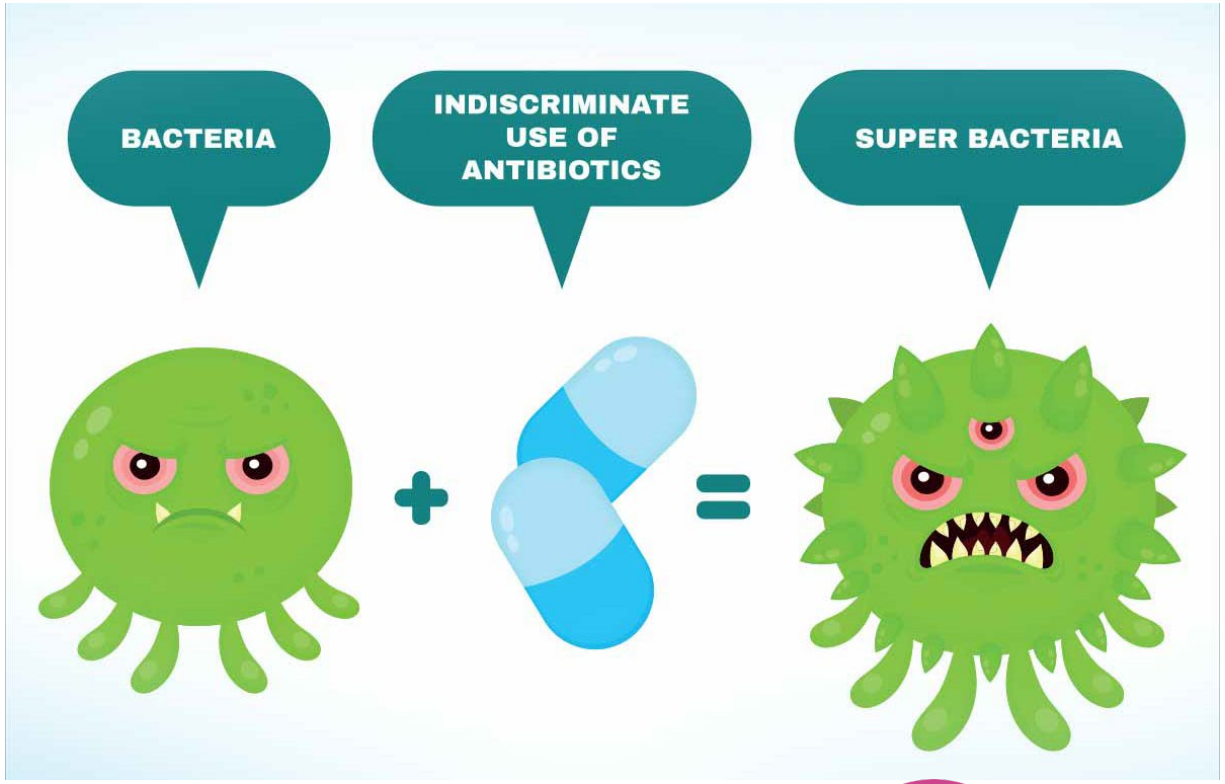
What does it mean when someone is colonized?

a. Disease has taken over
b. You can see the organism on the person
c. They have Colony Forming Units
d. The organism has become apart of a person's normal flora

Healthcare Associated Infections Program

Antibiotic Resistance (AR)

- When germs develop the ability to defeat the drugs designed to kill them
- Misuse & overuse of antimicrobials, including antibiotics & antifungals, in healthcare and agriculture
- Develop multidrug-resistance
- Has the potential to affect healthcare, veterinary, & agriculture industries

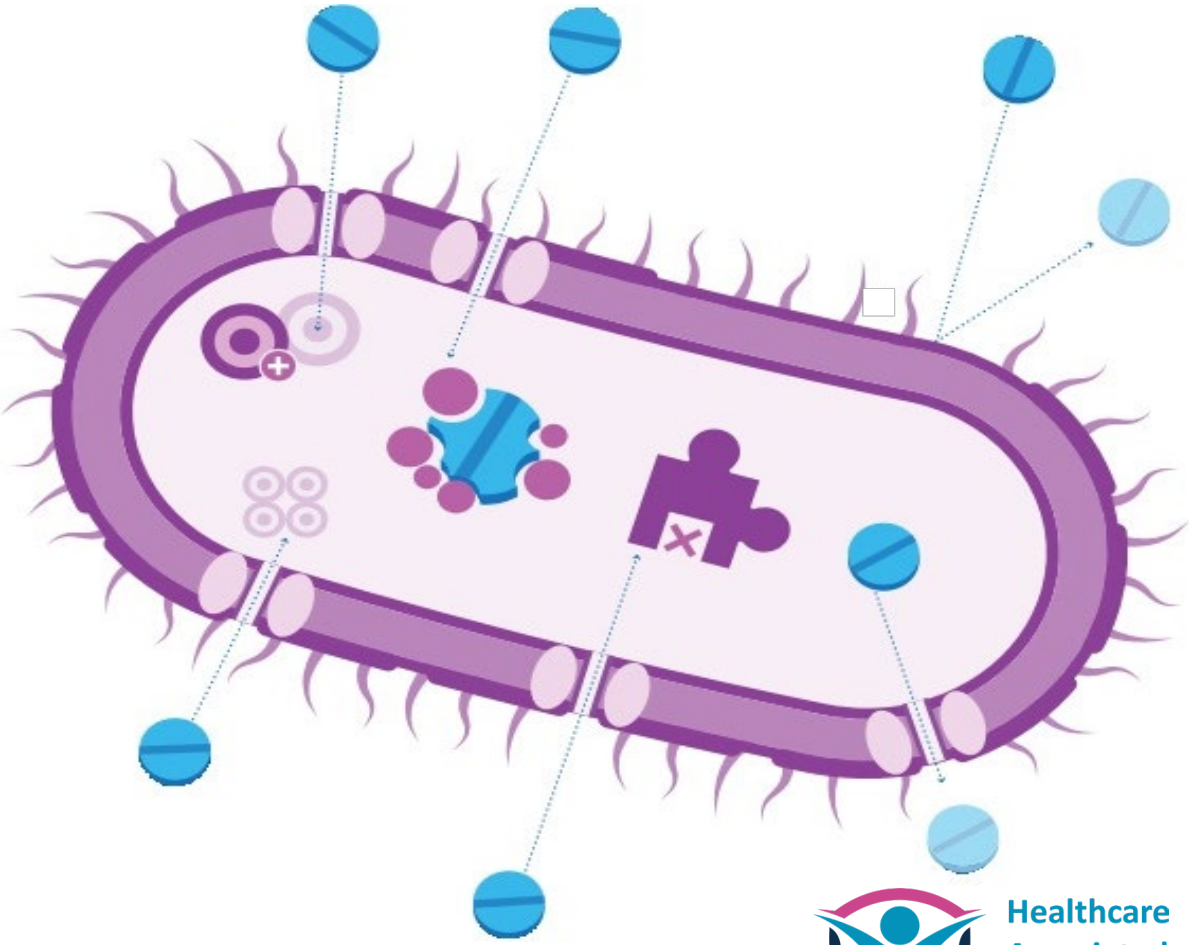


Healthcare Associated Infections Program

Resistance Mechanisms

- Various ways that microorganisms survive in the environment
- Public Health concern about production and sharing of genes that make all kinds of microorganisms be able to gain resistance quickly

(Ex. carbapenemase-producing, carbapenem resistant organisms (CP-CRO))



Healthcare Associated Infections Program

Carbapenem-Resistant Organisms (CRO)

- Microorganisms that can render one or more carbapenem drugs, ineffective
- **What are carbapenems?**
  - Potent *beta-lactam* antibiotics
  - Valuable in severe infections
  - Examples
    - Ertapenem*
    - Doripenem
    - Imipenem*
    - Meropenem*

  * = common in lab tests

Ex. Carbapenem-resistant organisms

- Enterobacterales (CRE)
  - ***Klebsiella pneumoniae, E. coli***
- *Pseudomonas* aeruginosa (CRPA)
- *Acinetobacter baumannii* (CRAB)

Healthcare Associated Infections Program

CROs continued

Enterobacterales

- *Escherichia coli*
- *Klebsiella pneumoniae*
- Enterobacter
- Citrobacter
- Hafnia
- Morganella
- Proteus
- Providencia
- Serratia

Pseudomonas

- *Pseudomonas aeruginosa*
- *Pseudomonas maltophilia*

***Acinetobacter calcoaceticus-Acinetobacter baumannii* complex:**

- *Acinetobacter calcoaceticus*
- *Acinetobacter baumannii*
- *Acinetobacter pittii*
- *Acinetobacter nosocomialis*

Knowledge Check

What has been contributing to antibiotic resistance?

a. Measles
b. Vaccinations
c. Chickens
d. Misuse of antibiotics

Knowledge Check - Answer

What has been contributing to antibiotic resistance?

a. Measles
b. Vaccinations
c. Chickens
d. Misuse of antibiotics

Healthcare Associated Infections Program

Carbapenemase-producing Organisms (CPO)

- Organisms that produce enzymes that inactive carbapenems are called **carbapenemase**
- Leads to limited treatment, high mortality rates, may cause outbreaks
- Acquired/inherited by other CROs that may carry the gene(s) possible for carbapenemase production

Ex. Carbapenemase-Producing (CP), Carbapenem-resistant organisms

- CP-CRE
- CP-CRPA
- CP-CRAB

Healthcare Associated Infections Program

Carbapenemase gene mechanisms

The Big "Five"

- KPC
- NDM
- VIM
- IMP
- OXA-48

- Oxa-23
- Oxa-24/40
- Oxa -58
- Oxa-235 like

Resistance Mechanism Test Example

CTX-M resistance marker PCR, BAL	DETECTED !
Not Detected	
Comment: When CTX-M is detected, physicians should consider treating with carbapenems.	
IMP resistance marker PCR, BAL	Not Detected
Not Detected	
KPC resitance marker PCR, BAL	DETECTED !
Not Detected	
Comment: This result has been reported to the San Diego County Public Health Laboratory and Epidemiology Unit as required by the California Code of Regulations, Title 17, Section 2505. When KPC, NDM, VIM, IMP, or OXA-48 are detected, physicians should consider consulting Infectious Diseases for treatment options.	
NDM resistance marker PCR, BAL	Not Detected
Not Detected	
OXA-48-like resistance marker PCR, BAL	Not Detected
Not Detected	
VIM resistance marker PCR, BAL	Not Detected
Not Detected	

Concerning Multidrug-resistant Organisms

Targeted by CDC

- Pan-resistant organisms
- CP-CRE
- CP-CRPA
- CP-CRAB
- *Candida auris* (fungus)

Epidemiologically important MDROs

- MRSA
- ESBL-producing Enterobacterales
- VRE
- Multidrug-resistant Pseudomonas aeruginosa
- Drug-resistant Streptococcus pneumoniae

What do I do about target organisms?

1. **Target organisms**
    1. Reportable to Public Health
    2. Follow IPC guidelines
    3. Monitor outcomes & outbreaks
    4. Public health guidelines

2. **Epidemiologic important organisms**
    1. Monitor outcomes & outbreaks
    2. Develop facility level guidelines*

Healthcare Associated Infections Program

Knowledge Check

What do CPOs do?

a. Kill pathogens
b. Produce carbapenemase
c. Identify pathogens
d. Secretes antibodies

Healthcare Associated Infections Program

Knowledge Check - Answer

What do CPOs do?

a. Kill pathogens

b. Produce carbapenemase

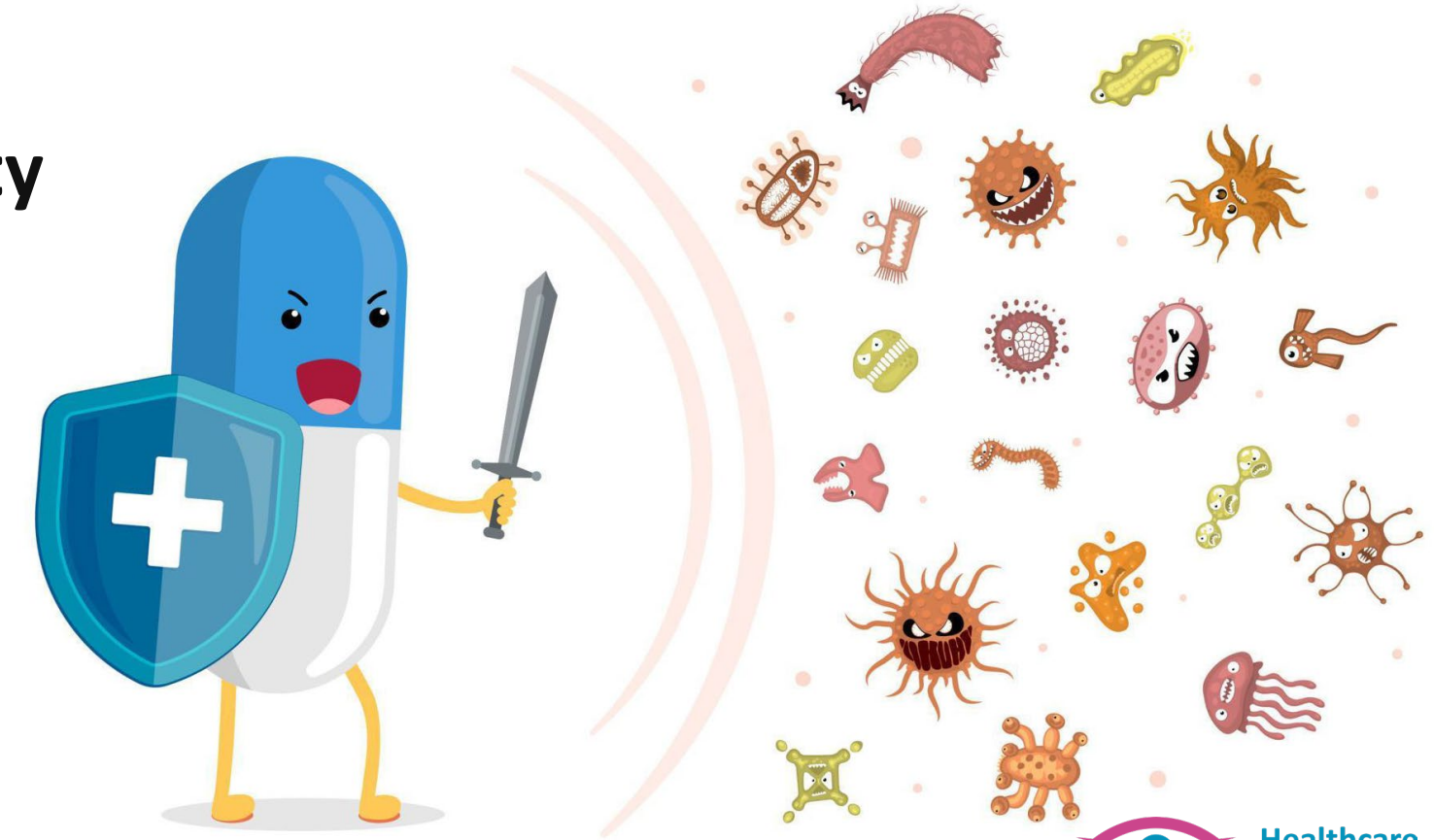
c. Identify pathogens

d. Secretes antibodies

Healthcare Associated Infections Program

Antimicrobial Susceptibility Testing

- **Antimicrobial Susceptibility Testing** (AST)
- **Antifungal Susceptibility Testing** (AFST)



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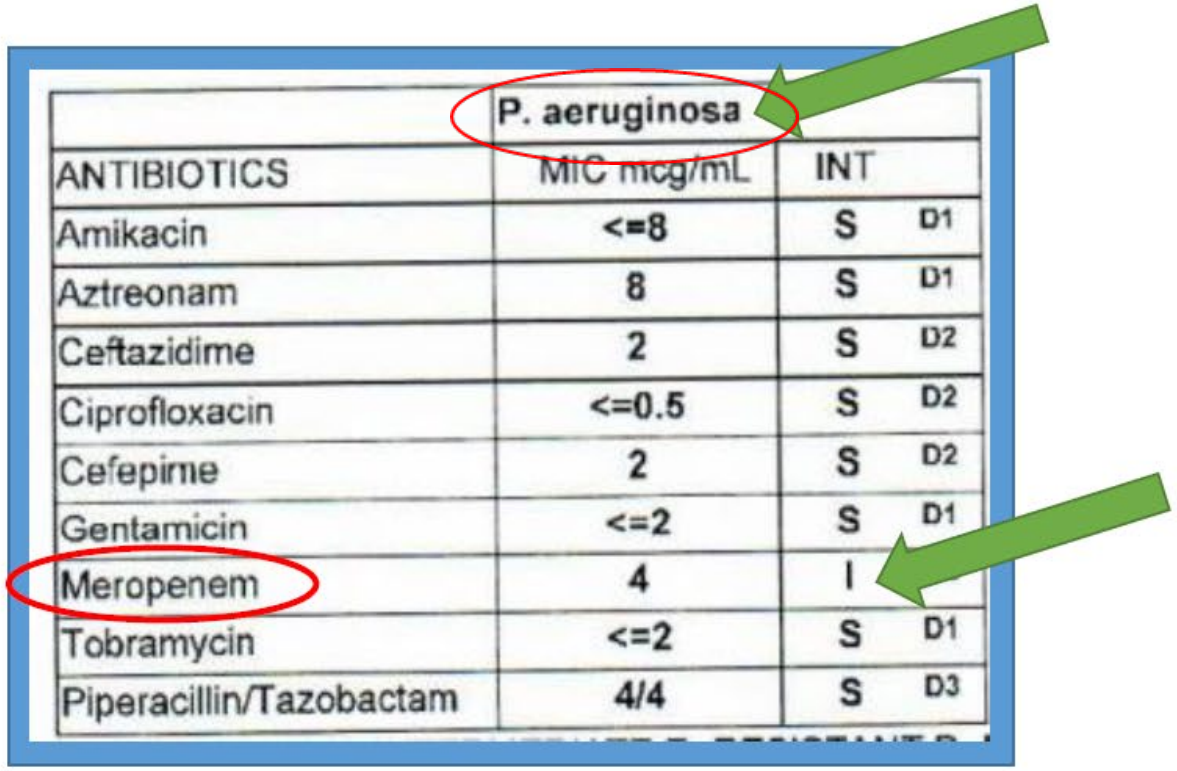
Types of Testing

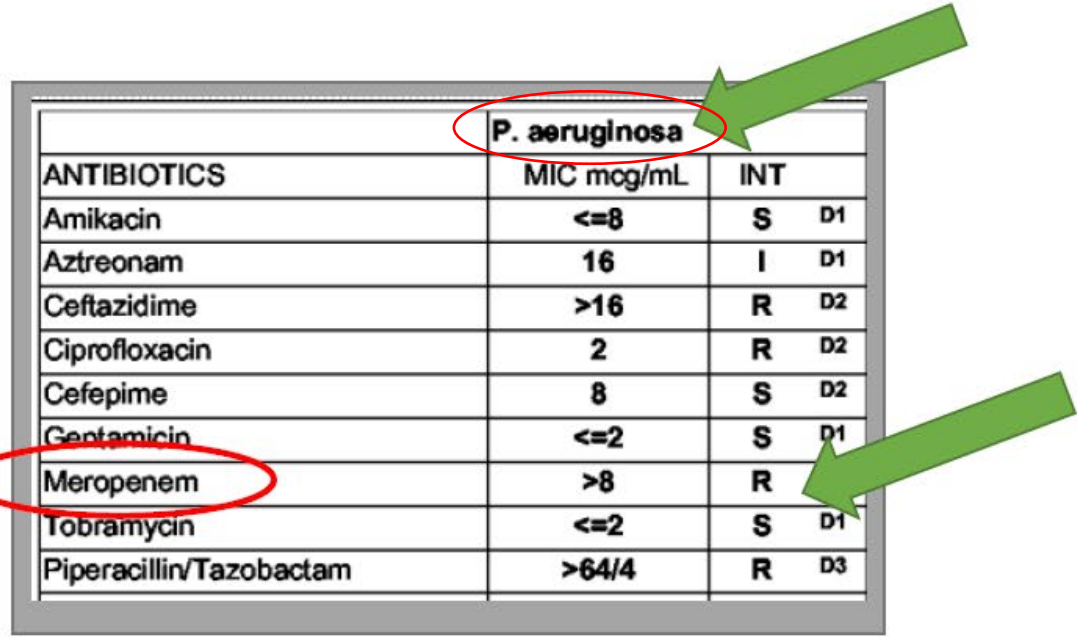
Tests	Description
Disk Diffusion **Broth Microdilution**	Shows if an organism is resistant, intermediate, or susceptible to a variety of antibiotics/antifungals (ex. AST)
mCIM **(modified carbapenem inactivation method)** **STAR-Carba**	Quickly detects presence of carbapenemase production (yes or no)
PCR (polymerase chain reaction)	Quickly detects presence of DNA of an organism (ex. Candida auris, CRO, CP-CRO)
WGS (whole genome sequencing)	Used for surveillance, outbreaks, may identify related cases vs. non-related cases

AST Examples



	P. aeruginosa	
ANTIBIOTICS	MIC mcg/mL	INT
Amikacin	<=8	S D1
Aztreonam	8	S D1
Ceftazidime	2	S D2
Ciprofloxacin	<=0.5	S D2
Cefepime	2	S D2
Gentamicin	<=2	S D1
Meropenem	4	I
Tobramycin	<=2	S D1
Piperacillin/Tazobactam	4/4	S D3

✓ Pseudomonas aeruginosa
X CRO
X CP



	P. aeruginosa	
ANTIBIOTICS	MIC mcg/mL	INT
Amikacin	<=8	S D1
Aztreonam	16	I D1
Ceftazidime	>16	R D2
Ciprofloxacin	2	R D2
Cefepime	8	S D2
Gentamicin	<=2	S D1
Meropenem	>8	R
Tobramycin	<=2	S D1
Piperacillin/Tazobactam	>64/4	R D3

✓ Pseudomonas aeruginosa
✓ CRO = CRPA
X CP

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AST Examples

✓ Klebsiella aerogenes
✓ CRO = CRE
? CP

Respiratory Culture w/ Stain (Final result)

Culture	**Many Klebsiella (Enterobacter) aerogenes (A)** Carbapenem Resistant Organism MDRO
Comments:	
Gram Stain	Many WBCs No organisms seen

Susceptibility

	MIC		**Klebsiella (Enterobacter) aerogenes** [1]
Ampicillin	>16	ug/ml	R
Ampicillin + Sulbactam	>16/8	ug/ml	R
Cefazolin	>32	ug/ml	R [1]
Cefepime	4	ug/ml	SSD
Ceftazidime	>16	ug/ml	R
Ceftriaxone	>32	ug/ml	R
Ciprofloxacin	<=0.5	ug/ml	S
Ertapenem	>1	ug/ml	R [2]
Gentamicin	2	ug/ml	S
Levofloxacin	<=1	ug/ml	S
Piperacillin + Tazobactam	>64/4	ug/ml	R
Tobramycin	2	ug/ml	S
Trimethoprim + Sulfamethoxazole	<=0.5/9.5	ug/ml	S

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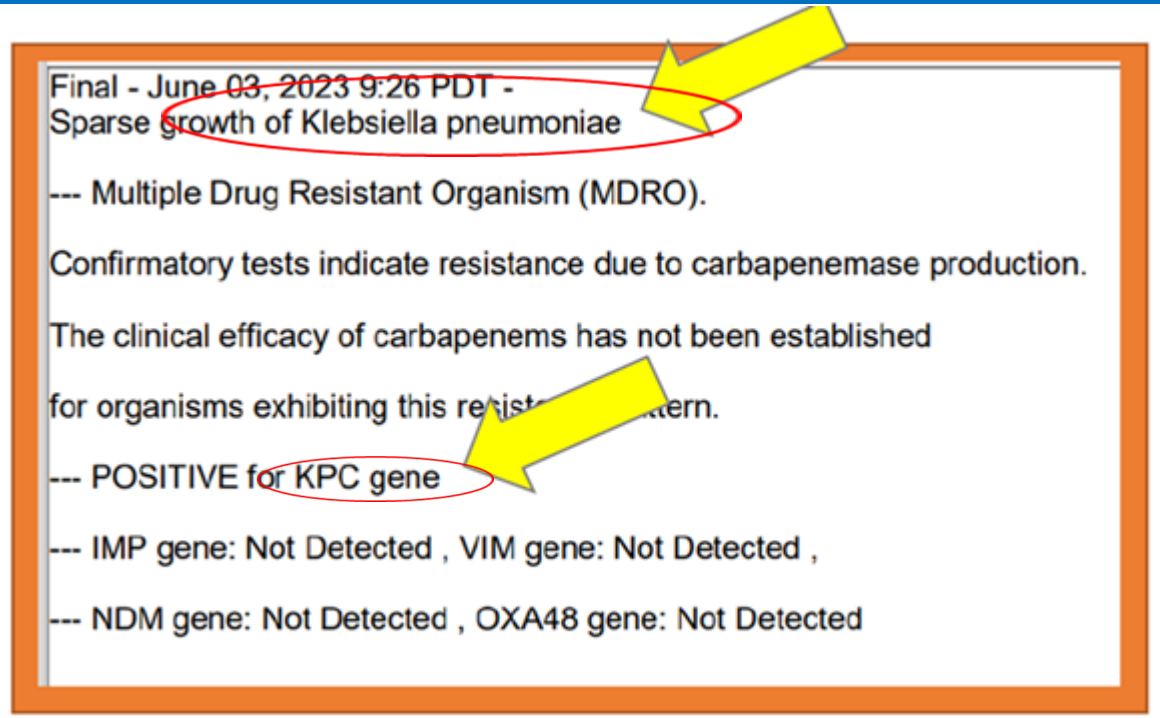
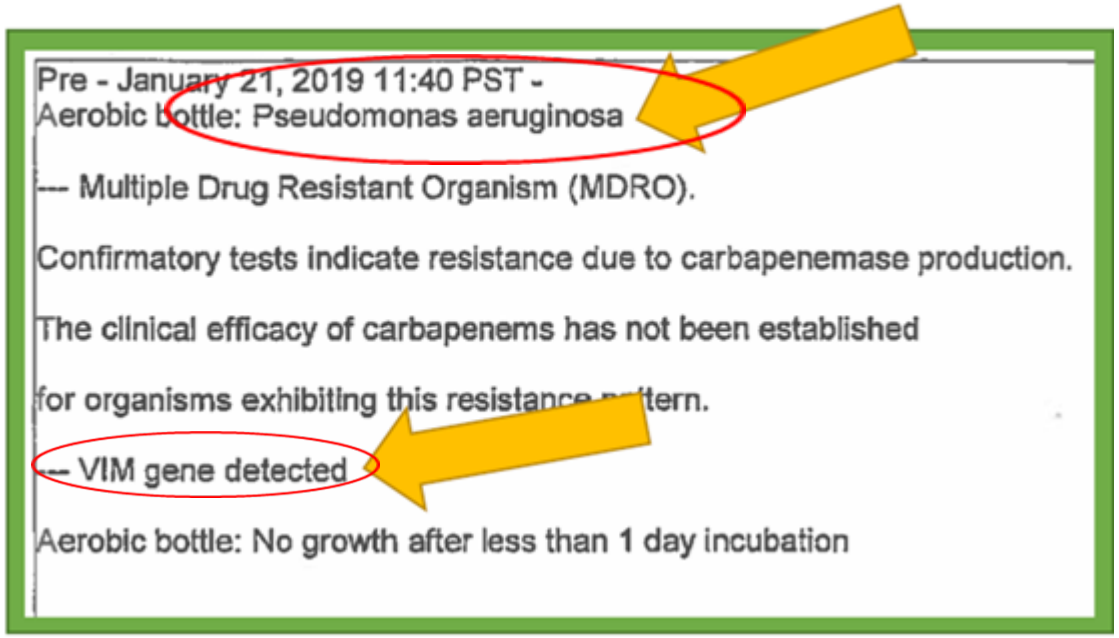
AST Examples





✓ Klebsiella pneumoniae
✓ CRO = CRE
✓ CP (KPC gene)
✓ CP-CRE

✓ Pseudomonas aeruginosa
✓ CRO = CRPA
✓ CP (VIM gene)
✓ CP-CRPA

Test Your Knowledge

Identification	**Acinetobacter baumannii complex**
CPO Real Time PCR	
blaIMP	Not Detected
blaKPC	Not Detected
blaNDM	Not Detected
blaOXA-48	Not Detected
blaVIM	Not Detected
OXA variant Multiplex Real-Time PCR	
OXA-23 like	Not Detected
OXA-24/40 like	Not Detected
OXA-58 like	Not Detected
OXA-235 like	Not Detected

Knowledge Check

Klebsiella aerogenes is resistant to the antibiotic, Ertapenem. What does this mean?

a. The antibiotic will work against the organism
b. The antibiotic will not work against the organism
c. The organism will digest the antibiotic
d. The organism will not digest the antibiotic

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Knowledge Check - Answer

Klebsiella aerogenes is resistant to the antibiotic, Ertapenem. What does this mean?

a. The antibiotic will work against the organism

b. The antibiotic will not work against the organism

c. The organism will digest the antibiotic

d. The organism will not digest the antibiotic

Carbapenem-resistant Klebsiella aerogenes or CRE

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Summary

Microbiology is Important for HAI Prevention

Microbiology knowledge can help with:

- Managing outbreaks
- Understand testing
- Infection surveillance
- Alerts to unusual pathogen changes in antibiotic susceptibility
- Infection prevention and control actions

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When in doubt, reach out!

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San Diego Healthcare-associated Infections Program is here for you

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Resources

- https://www.apic.org/Resource_/TinyMceFileManager/2016/IPs_Guide_to_the_Lab_012016.pdf
- https://www.cdc.gov/infection-control/hcp/isolation precautions/appendix-a-type-duration.html
- https://www.ncbi.nlm.nih.gov/books/NBK604207/
- https://reach.cdc.gov/sites/default/files/job-aids-resources/Gram_Stain_Procedure_Branded_508.pdf
- https://www.sandiegocounty.gov/content/sdc/hhsa/programs/phs/hai-program/transmission-precautions.html

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Questions?

For more information, contact

Jennifer.West1@sdcounty.ca.gov

Thank you!

www.sdhai.org

phs.hai.hhsa@sdcounty.ca.gov

COUNTY OF SAN DIEGO
HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL SAN DIEGO

Healthcare Associated Infections Program

County HAI Program can help!

- Outbreak response
- Support IP rounding
- Interpret state/federal guidance
- Support staff in-services
- Support quality improvement projects
- Share resources and tools

www.sdhai.org

phs.hai.hhsa@sdcounty.ca.gov

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Next Collaborative

*****August 27, 2025*****

11:00AM – 12:00PM

Microsoft TEAMS

Featured Topic:

Flunovid+RSV

1 Contact Hour Offered

Submit questions or
feedback about today's meeting to:

PHS.HAI.HHSA@sdcounty.ca.gov

Contact Hour Instructions

- **Ensure your TEAMS name is your full name**
- **Complete by July 25th, 5:00 PM**
- **Expect your certificate by August 15th.**

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Contact us at:

PHS.HAI.HHSA@sdcounty.ca.gov

The Public Health Services department, County of San Diego Health and Human Services Agency, has maintained national public health accreditation, since May 17, 2016, and was re-accredited by the Public Health Accreditation Board on August 21, 2023.

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