OREGON HEALTH AUTHORITY

September 17, 2025

Eastern Oregon Infection Prevention & Control (IPC) Community of Care

Respiratory Illness Case Studies

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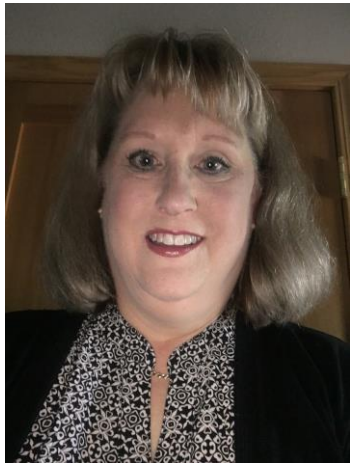
Healthcare-Associated Infections Program

Meet your OHA Team!



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HAI Infection Preventionist

Katie Cox
Epi
Regions 6 and 9

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Epi
Region 7

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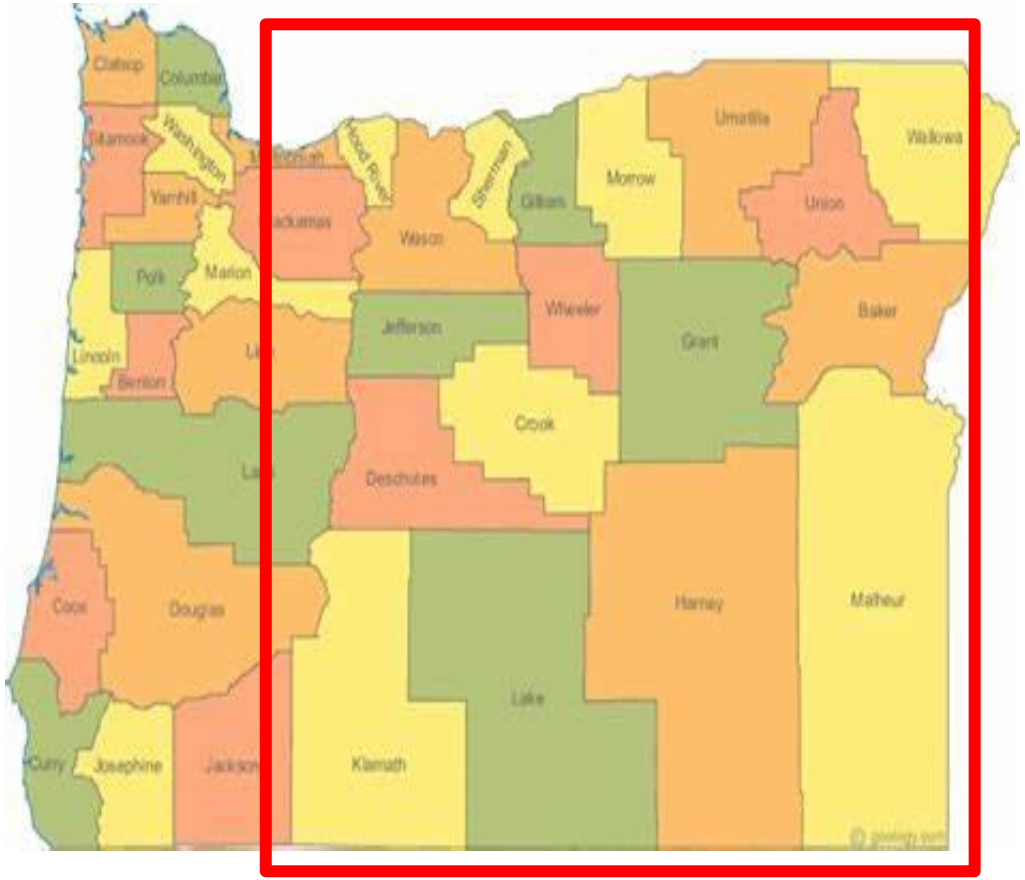
MDRO IP Eastern Oregon

Purpose

Our time is intended to provide a space for infection preventionists and local public health personnel in Regions 6, 7 and 9 to come together to share ideas and stories and to learn about topic in infection prevention.

Our goal is to build community among a group of practitioners who are commonly isolated as the only one in their setting.

This time is **not** intended to provide specific recommendations for a facility. This space will provide a connection with the OHA or LPHA infection preventionists and epidemiologists who can provide that direct guidance.



Housekeeping

- Please turn off any AI recording/technology (against OHA policy)
- If you have questions during today's presentation, please feel free to raise your hand or type your question into the chat.

Agenda

- Review 3 Case Studies
- Discussion & Questions

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Case Study #1

Its Early Fall……

Scenario:

- HB is 79 years old resident who lives in the assisted living part of your facility.
- He has hypertension, diabetes, COPD and hyperlipidemia
- He regularly takes Toprol XL ,Sitagliptin (Januvia) , Atorvastatin, and Advair Inhaler and uses Albuterol prn for shortness of breath and wheezes.

Its early Fall……

- Over the last few days, he has been slowly feeling worse with the following symptoms:
  - ***runny nose and nasal congestion***
  - ***cough***
  - ***mild sore throat***
  - ***headache***
  - ***mild body aches***

- He asks the staff to come to his room to discuss these symptoms and what can be done to feel better

- The staff asks a few more questions about his symptoms and he responded:
  - ***No shortness of breath, cough is new, and he hasn't been around anyone sick lately***

Case Study #1 - Question

- **Q1: What type of upper respiratory infections would come to mind for HB?**

TABLE 1

Differential Diagnosis for the Common Cold

Diagnosis	Symptom onset	Cough	Sore throat	Fever	Rhinorrhea	Aches	Watery eyes	Sneezing	Nasal congestion	Headache	Shortness of breath
Acute bronchitis	Gradual	Prominent, persistent, dry or wet	Common	None or low grade	Uncommon	Mild	Common	Uncommon	Uncommon	Common, mild	Common
Allergic rhinitis	Gradual	Common, chronic	Possible, especially on awakening	None	Common, prominent	None	Common	Prominent	Common	Uncommon	Uncommon
Bacterial sinusitis	Gradual	Common	Common	Common	Common	Common	Uncommon	Uncommon	Common	Common	Uncommon
Common cold	Gradual	Common, dry	Common	None or low grade	Common	Mild	Common	Common	Common	Common, mild	Uncommon
Influenza	Abrupt	Common, dry hacking	Common	Characteristic; high and rises rapidly	Common	Early, prominent	Uncommon	Uncommon	Possible	Prominent	Uncommon
Pertussis	Gradual	Prominent, paroxysmal, whoop-like	Uncommon	None or low grade	Uncommon	Uncommon	Uncommon	Uncommon	Uncommon	Uncommon	Common
Pharyngitis	Gradual	Uncommon	Characteristic; prominent	Variable (low grade if viral, high if bacterial)	Common	Can be severe if bacterial	Common	Common if viral	Uncommon	Common; mild if viral, severe if bacterial	Uncommon

The Common Cold

- Colds are typically minor infections of the nose and throat (upper respiratory tract) and be caused by more than 200 different respiratory viruses.
- Rhinoviruses are the most common cause of colds in the U.S.
  - Parainfluenza viruses, adenoviruses, enteroviruses, human metapneumovirus and common human coronaviruses also cause colds.
- Cold season begins in the early fall, and will run through the spring

Case Study #1 - Questions

- **Q2: HB wants to know how he got this infection? How would you answer his concern?**

Spread

- Colds are highly contagious
- Most often spread through ***droplets*** of fluid from an infected person sneezing or coughing.
- These droplets can enter the body through breathing them in or touching a ***contaminated surface then touching the eyes, nose or mouth.***
- Some viruses can also spread through ***close personal contact***, such as shaking hands with an infected person and then touching your eyes, nose, or mouth.
- The incubation period for the common cold, the time between exposure to the virus and the onset of symptoms, typically ranges from 12 hours to 3 days but this can vary based upon the type of cold virus.

https://www.aafp.org/pubs/afp/issues/2019/0901/p281.htm |

Scenario (continued)

HB is interested in any interventions, like an antibiotic, he can do/take to help him feel better.

- Q3: What are effective interventions for this type of infection?

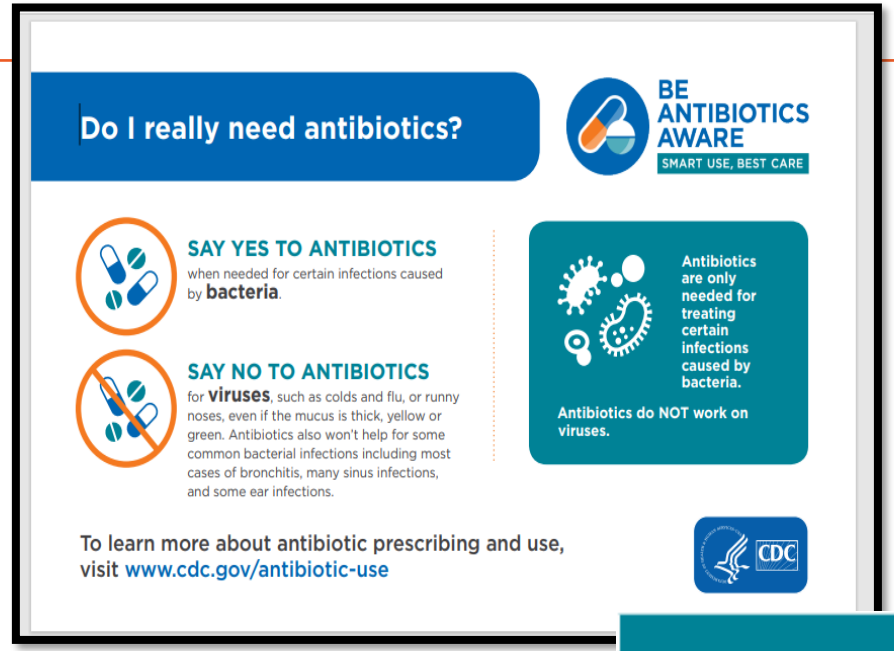
The Common Cold is VIRAL…. not Bacterial

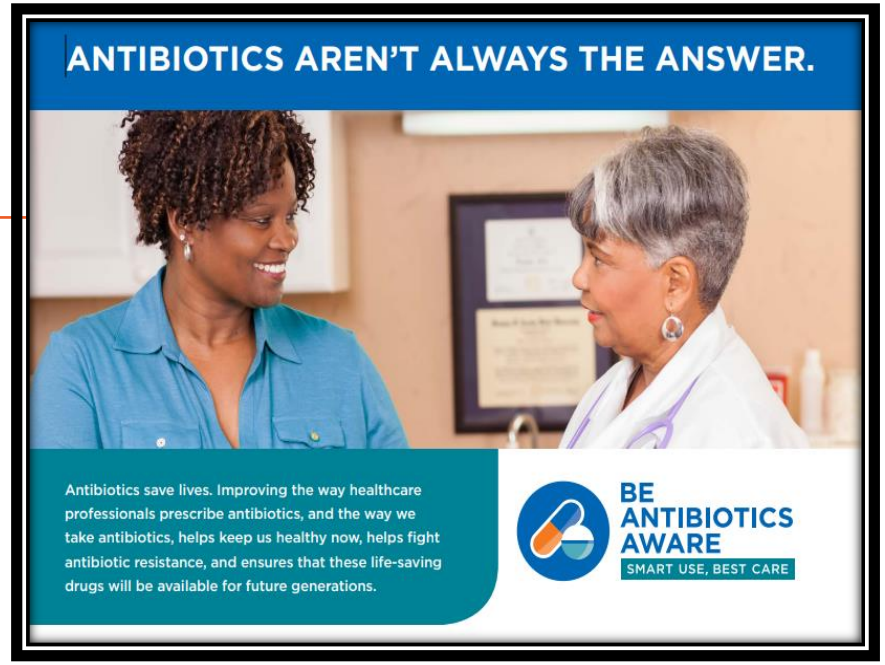
Why Taking Antibiotics for a Cold Can Be a Problem

It might not seem like you're doing any harm if you take a medicine even though it doesn't treat your cold, but it can.

When people take antibiotics when they don't have to, over time, the medicine becomes less effective.

Someday you'll really need one because you've got an illness caused by a bacteria, but it won't work.





C:/Users/or0264120/Downloads/Arent-Always-The-Answer-FS-508.pdf

Common Condition	Common Cause			Are Antibiotics Needed?
	Bacteria	Bacteria or Virus	Virus	
Strep throat	✓			Yes
Whooping cough	✓			Yes
Urinary tract infection	✓			Yes
Sinus infection		✓		Maybe
Middle ear infection		✓		Maybe
Bronchitis/chest cold (in otherwise healthy children and adults)*		✓		No*
Common cold/runny nose			✓	No
Sore throat (except strep)			✓	No
Flu			✓	No

* Studies show that in otherwise healthy children and adults, antibiotics for bronchitis won't help you feel better.

Treatment(s) of the Common Cold

- **Focused on relief of symptoms**
  - Get plenty of rest
  - Stay hydrated by drinking plenty of fluids
  - Use a clean humidifier or cool mist vaporizer
  - Use saline nasal spray or drops
  - Breathe in steam from a running shower
  - Use lozenges or cough drops (not for children under 4)
  - Use honey to relieve cough (must be at least 1 year old)

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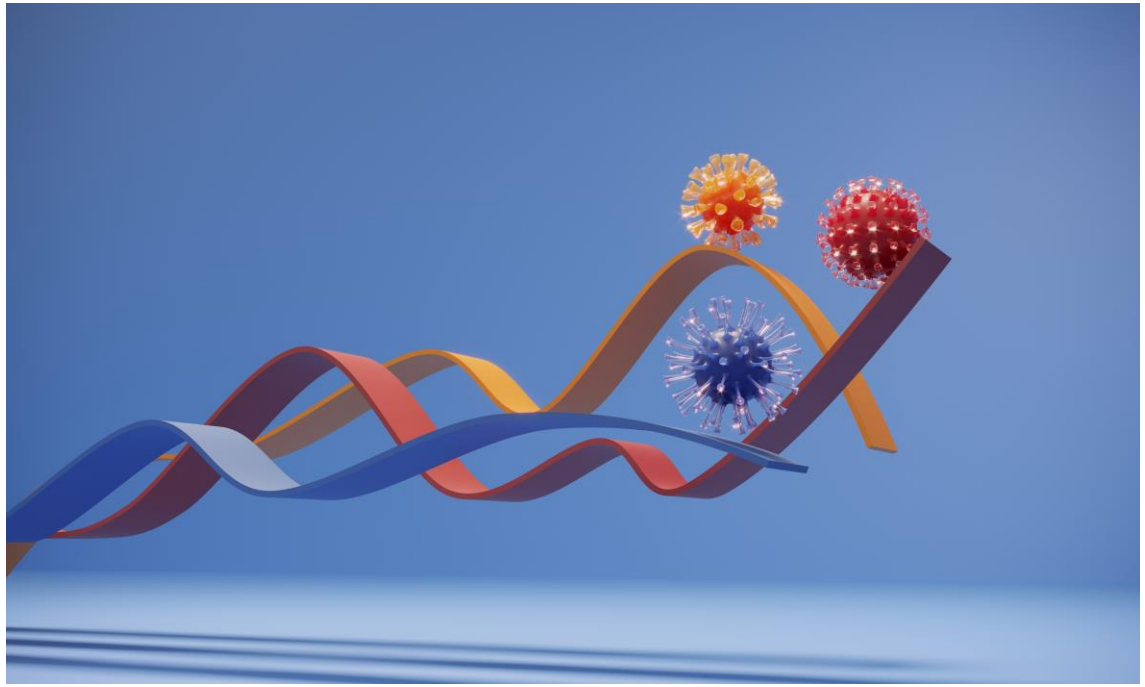
Case Study #2

Part 1

- Patricia, an 87-year-old resident in a nursing facility, develops symptoms of influenza-like illness (ILI), including a cough, sore throat, and fever.
- Patricia's symptoms begin 4 days after she attended the facility's annual Halloween party.
- Residents, staff, and a few of Patricia's family members, as well as other residents' family members, also attended the Halloween party.

Part 1, continued

- Based on Patricia's symptoms, the nursing staff suspect that she may have the flu, but they are aware that SARS-CoV-2 (the virus that causes COVID-19) and RSV are also circulating in the community.
- No other residents or staff in the facility appear to be symptomatic at this time.



Question for Discussion

- If you were the IP at this facility, what would your next steps be?

Part 2

- Patricia’s test results come back negative for COVID-19, flu A, and flu B, but positive for RSV.

Questions for Discussion

- What transmission-based precautions (TBP) should be used for Patricia and what PPE should staff wear when providing care to Patricia?
- How long should TBP be used?

Questions for Discussion

- If Patricia has a roommate, what steps can be taken to reduce the risk of RSV transmission to her roommate?
- Do you need to report this case to the local public health authority (LPHA)?

Part 3

- Later that afternoon, 2 more residents who live in separate wings of the facility begin to develop a cough, sore throat, fever, and malaise.
- The ill residents are tested for COVID-19, flu A, flu B, and RSV.
- Both residents test positive for RSV and one of the residents also tests positive for COVID-19.

Questions for Discussion

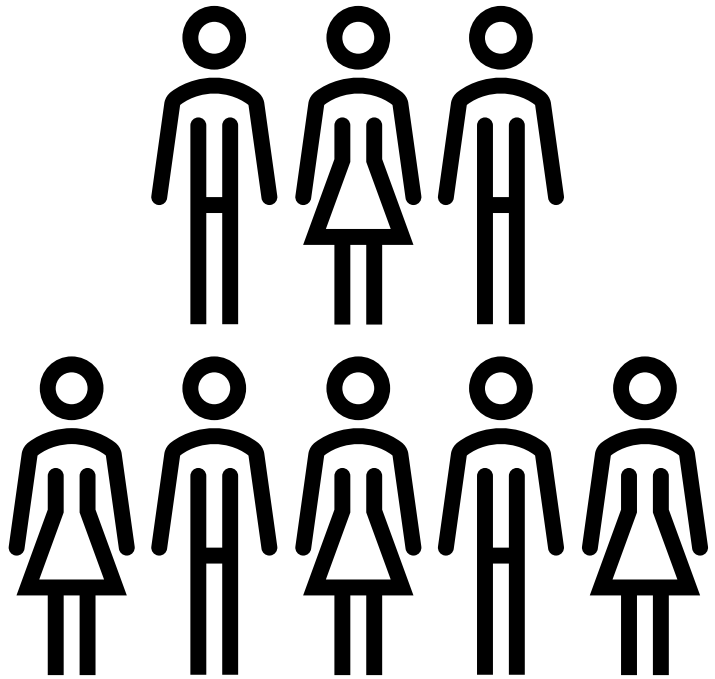
- What are your next steps as the IP in this facility?
- What would you do differently for the resident who is positive for RSV and COVID-19?
- Is this an outbreak? Do you need to report it to your LPHA?

Part 4

- Over the next several days, more residents and staff develop respiratory symptoms:
  - 2 staff who provided care to ill residents
  - 3 residents, including the roommate of the first case
- The ill residents and staff are tested for COVID-19, flu A, flu B, and RSV.

Part 4, continued

- All 5 ill individuals test positive for RSV, bringing the total number of respiratory illness cases in the facility to 8:
  - 7 RSV-positive cases
  - 1 RSV-positive & COVID-19-positive case



Questions for Discussion

- Can the ill staff continue to work?
- If the ill staff must be excluded from work, when can they return-to-work?
- What additional strategies or resources might you consider to slow transmission within the facility?

Part 5

- After 14 days have passed since the symptom onset date of the last ill resident or staff member, the LPHA notifies the nursing facility that the outbreak is over.

Question for Discussion

- Now that the outbreak is over, what would you do next?

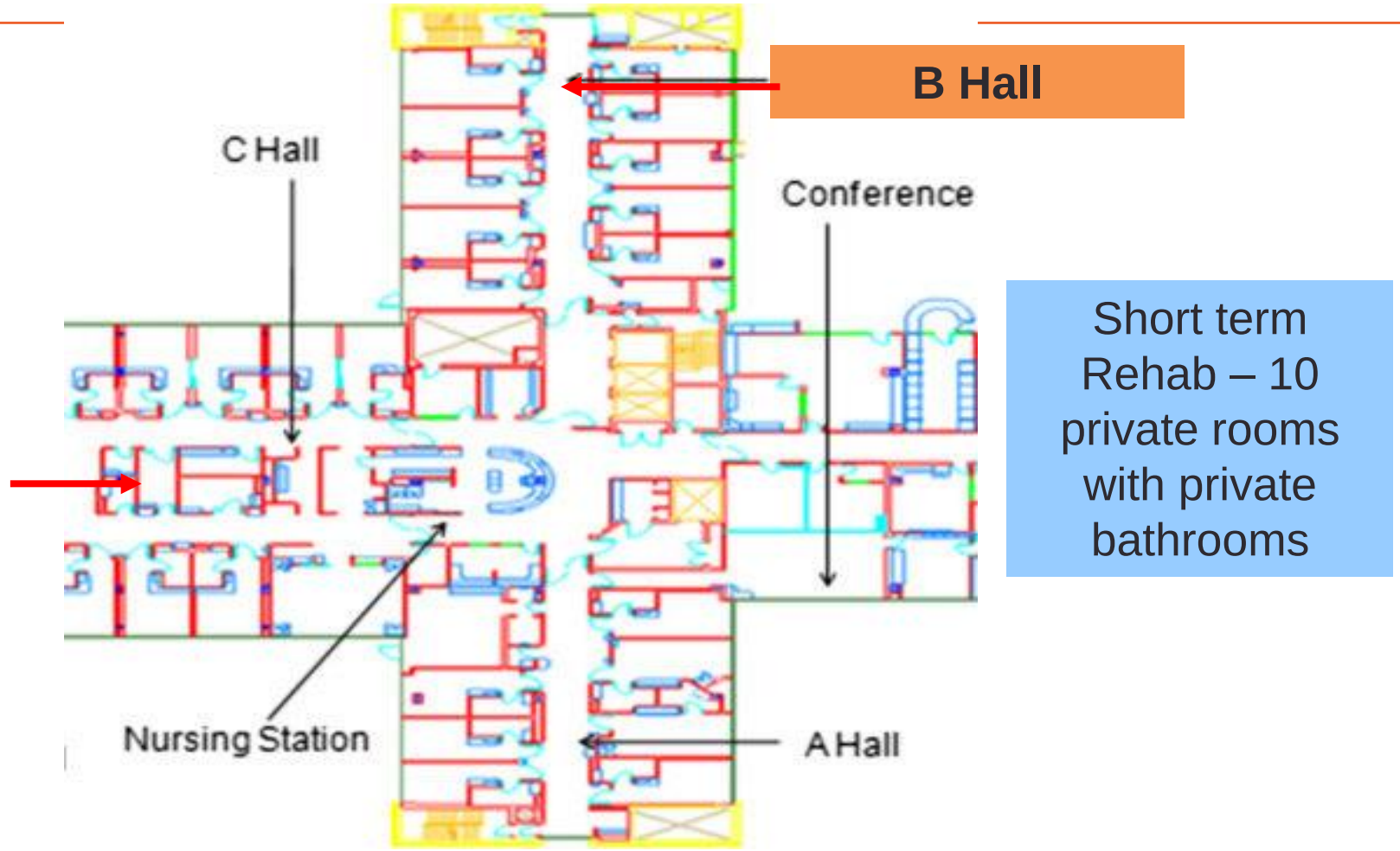
Case Study #3

Scenario

- You are the infection preventionist for Happy Meadows Nursing Home, an 80-bed facility with a current census of 64.
- There is a short-term rehab hall with 10 private rooms with private bathrooms (8 currently occupied).
- The remaining halls are for long-term residents and are semi-private with shared Jack/Jill bathrooms.
- At your annual flu vaccination clinic last month, 88% of residents and 45% of employees were vaccinated against flu.

Scenario

Hallways A, B, and C are long term care residents and have semi-private rooms with shared jack/jill bathrooms



Short term Rehab – 10 private rooms with private bathrooms

Scenario (continued)

- Two days ago, a long-term B Hall resident, Mr. Green, was hospitalized with acute respiratory symptoms and diagnosed with Influenza A.

B – Hallway Residents (continued)

- Today (2 days later), the following people on B-Hallway are now symptomatic and some testing positive for Flu A.
  - Mr. Jones is the roommate of Mr. Green and is experiencing a fever and cough. His rapid flu test was positive for Influenza A.
  - Mr. Alvarez has a cough but is afebrile, and positive rapid test. He uses a CPAP at night at baseline. Today, his doctor also prescribed nebulizers for his cough.
    - He has a roommate who is asymptomatic.
  - Mr. Roberts is experiencing a cough and low-grade fever but tested negative by rapid test.
    - His roommate is asymptomatic.

Scenario (continued) - A, C and Rehab Hallways

- **Hallway A** – no symptomatic residents
- **Hallway C** – no symptomatic residents
- **Short-term rehab unit** – no symptomatic residents

Scenario (continued) - Employees

- Nurse: Called in from work last night with cough and body aches, last worked 2 days ago on B Hall

- Housekeeper: Was sent home today during her shift when she developed a fever and had a positive rapid test.

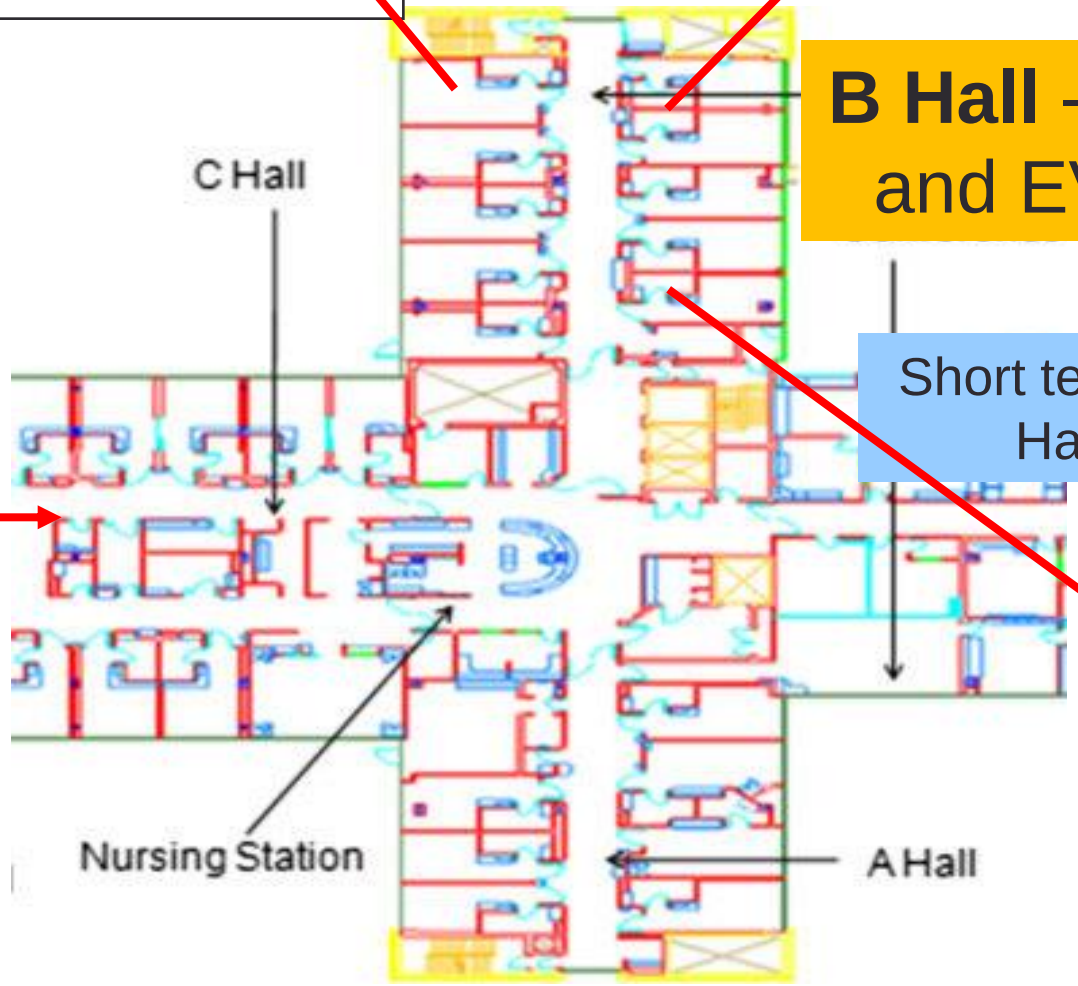
    - She had worked on B hall the prior two days but was working on C Hall today before she was sent home.

Scenario

Mr. Alvarez Flu + (CPAP) & Asymptomatic roommate

Shared room of Mr. Green and Mr. Jones (both Flu A+)

B Hall - RN Flu A + and EVS Flu A +



EVS staff cleaned rooms Hall C

Short term Rehab Hallway

Mr. Roberts + S/S but is Flu A-
His roommate is without s/s

Questions

- Q#1: Who would you **isolate** in this scenario?
- **Isolation:**
  - This practice is used to separate individuals who are confirmed to be infected with a contagious disease from those who are healthy.

The primary goal of isolation is to prevent the spread of the disease to others:

Keep negatives negative!

Question #2: What actions could you take for the Flu negative but exposed residents

- Mr. Roberts who has + signs/symptoms but is Flu A negative
- Mr. Robert's asymptomatic roommate
- Mr. Alvarez's asymptomatic roommate

Quarantine is what we do for the **exposed**…

- This involves restricting the movement of individuals who have been exposed to a contagious disease but are not showing symptoms as yet.

- Quarantine is a precautionary measure to monitor these individuals during the **incubation period** of the disease.

"If transmission is limited to specific units, consider limited quarantine of those units (e.g., restricting those units from group activities or communal dining with residents from other units)".

https://www.cdc.gov/long-term-care-facilities/hcp/respiratory-virus-toolkit/index.html

Influenza Incubation Period

- While the general incubation period for the flu is usually between one and four days, but this period can vary
  - The average incubation period for the flu is two days.
  - This means that, on average, people start to develop flu symptoms about two days after coming into contact with the influenza virus.

https://www.healthline.com/health/flu-incubation-period#contagiousness

Let's build a timeline of current cases and future cases to come

- Day -3: RN worked Hallway B
- Day -2: Mr. Green hospitalized w/Flu A; RN and EVS cleaned rooms on Hallway B (exposed)
- Day -1: RN called in with S/S; EVS worked Hallway B
- Day 0: **Today,** EVS cleaned rooms on Hallway C, sent home + Flu A
- Day +1:
- Day +2:

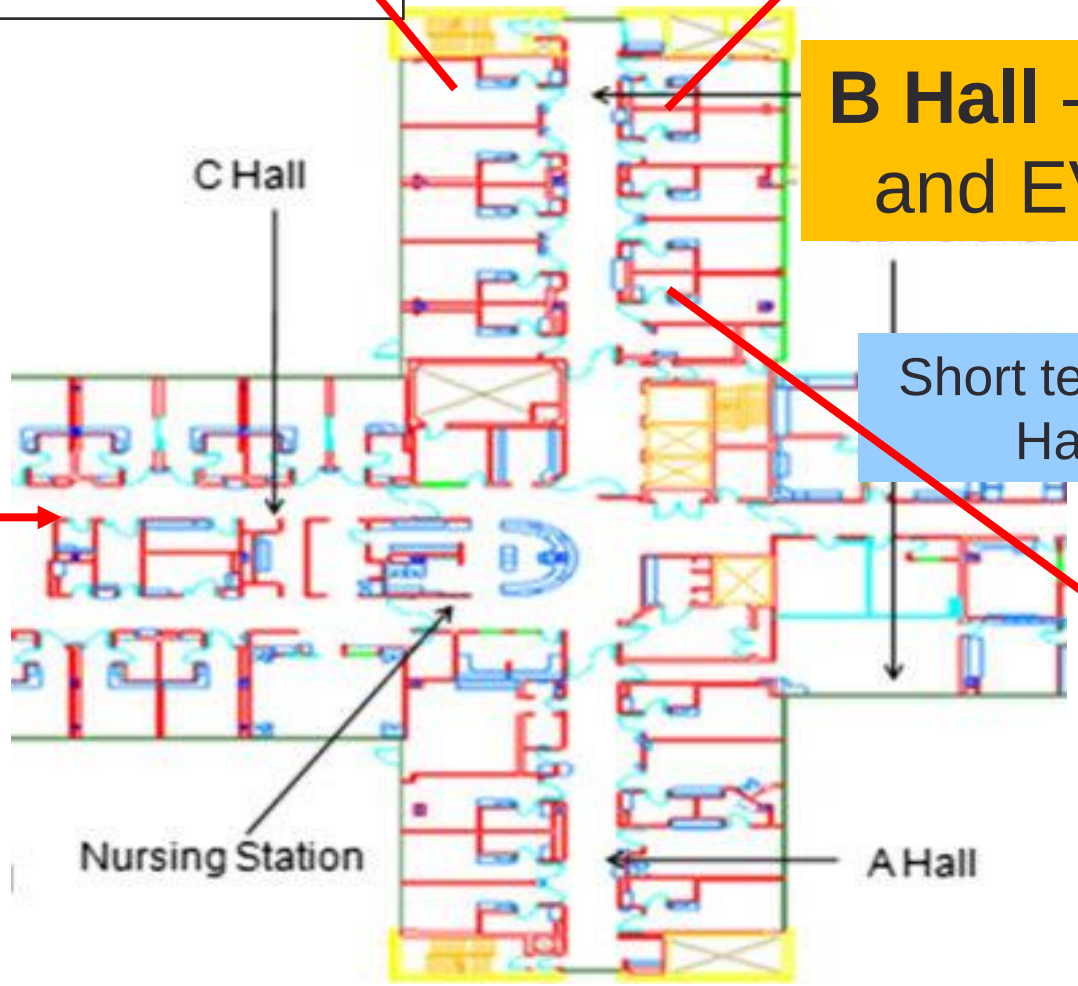
Question#3 – Based on our timeline, which Hallway has been exposed and residents are at risk of developing Influenza A cases?

Scenario

Mr. Alvarez Flu + (CPAP) & Asymptomatic roommate

Shared room of Mr. Green and Mr. Jones (both Flu A+)

B Hall - RN Flu A + and EVS Flu A +



EVS staff cleaned rooms Hall C

Short term Rehab Hallway

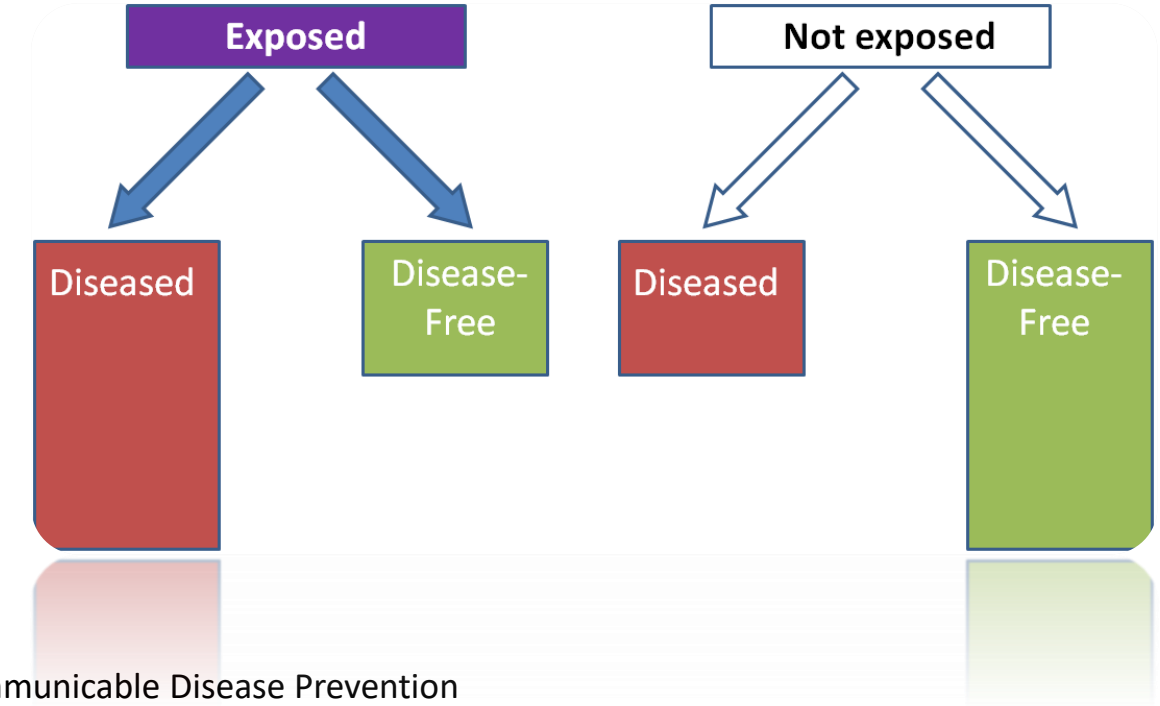
Mr. Roberts + S/S but is Flu A-
His roommate is without s/s

Let's build a timeline of current cases and future cases to come

- Day -3: RN worked Hallway B
- Day -2: Mr. Green hospitalized w/Flu A; RN and EVS cleaned rooms on Hallway B
- Day -1: RN called in with + Flu s/s; EVS worked Hallway B
- Day 0: **Today,** EVS cleaned rooms on Hallway C, sent home, + Flu A
- Day +1:
- Day +2: ***Residents on Hallway C are expected to start having symptoms/signs***
- Day +3:
- Day +4:
- Day +5:

Question

- Q#4: How would you **treat** those who are symptomatic and have Influenza A **vs** those who have been exposed, have not tested positive yet and are asymptomatic?



What are Treatment and Prophylaxis Recommendations :

- For Influenza:
  - Provide antiviral treatment immediately for all residents who have confirmed or suspected influenza.
  - Provide **chemoprophylaxis** to exposed residents on units with influenza cases (currently impacted wards) as soon as an influenza outbreak is determined.

https://www.cdc.gov/long-term-care-facilities/hcp/respiratory-virus-toolkit/index.html

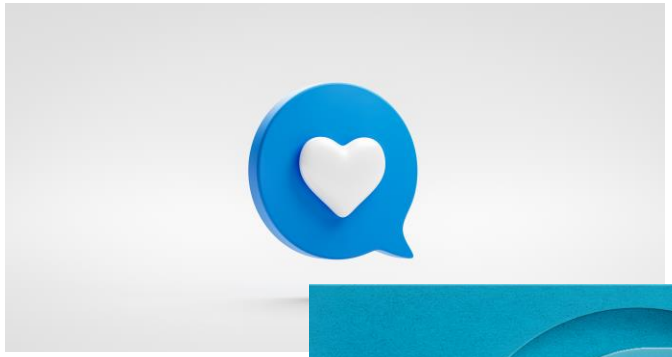
What action(s) would you take for Mr. Alvarez and his roommate

- Mr. Alvarez has a cough but is afebrile, and positive rapid test. He uses a CPAP at night at baseline. Today, his doctor also prescribed nebulizers for his cough.
- He has a roommate who is asymptomatic.

https://www.cdc.gov/flu/hcp/infection-control/healthcare-settings.html

CDC, Infection Prevention and Control Strategies for Seasonal Influenza in Healthcare Settings, April 2025, for Healthcare Providers, #6 section under recommendations

Comments, Thoughts, Questions….



Next Meeting:

Date: October 15, 2025

Time: 1:00 pm – 2:00 pm

Session Topic: Respiratory Guidance

Presenter: Dan Daniluk

Resources

- CDC Viral Respiratory Pathogens Toolkit for Nursing Homes: https://www.cdc.gov/long-term-care-facilities/hcp/respiratory-virus-toolkit
- OHA At-A-Glance Infection Control for Respiratory Pathogens: https://sharedsystems.dhsoha.state.or.us/DHSForms/Served/le105052.pdf
- OHA Interim Summary of Long-Term Care Facility Infection Control for COVID-19 and Other Respiratory Pathogens: https://sharedsystems.dhsoha.state.or.us/DHSForms/Served/le129850.pdf
- OHA Respiratory Disease Outbreak Investigative Guidelines: https://www.oregon.gov/oha/PH/DISEASESCONDITIONS/COMMUNICABLEDISEASE/REPORTINGCOMMUNICABLEDISEASE/REPORTINGGUIDELINES/Documents/respi-guide.pdf

Contacts

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Thank you!! 😊