

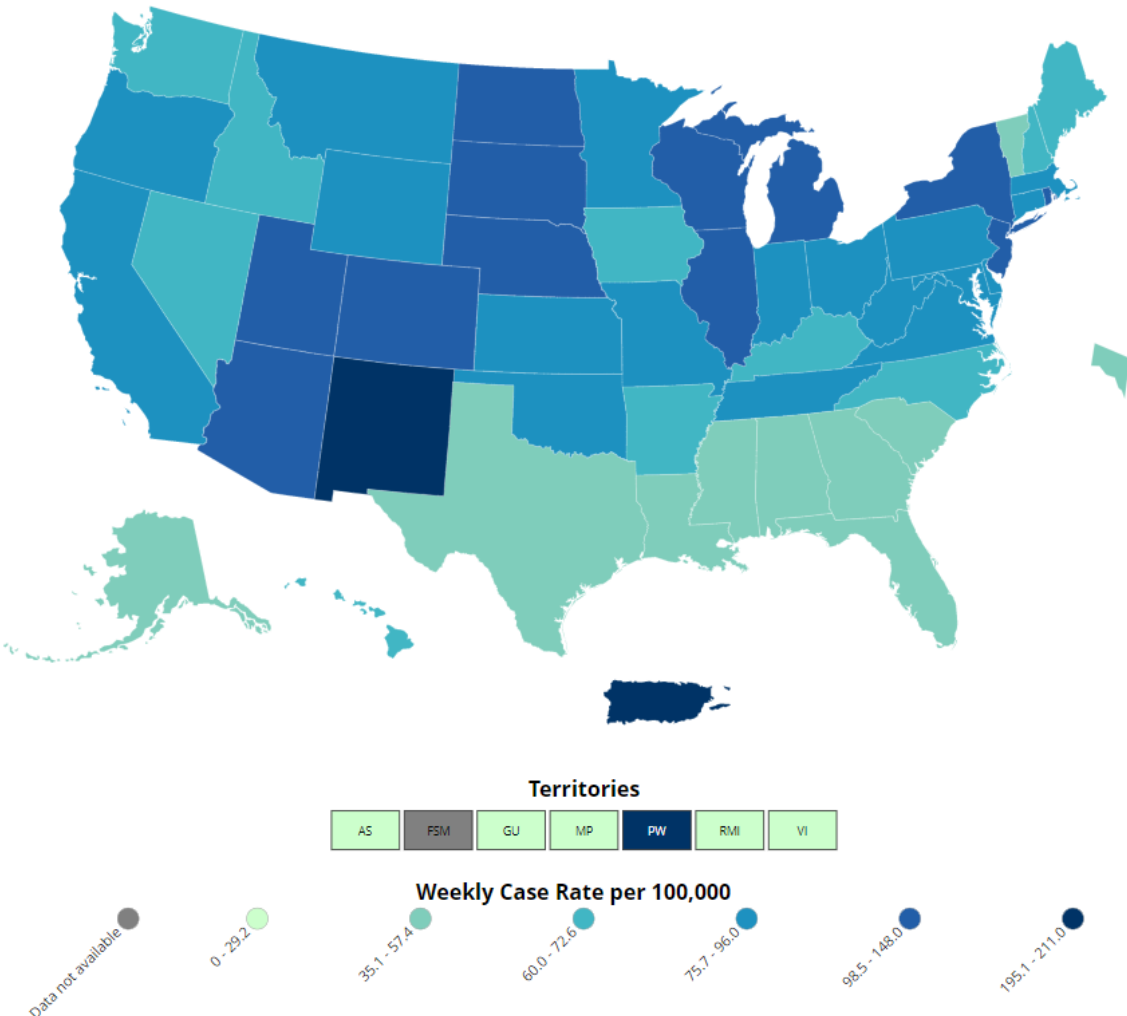
PDPH/LTCF Conference Call – Friday, 11/18/2022

Agenda

- **SARS-CoV-2 Surveillance Update**
- **Seasonal Influenza in LTCFs: Testing and Infection Prevention and Control Considerations**
- **Guidance Reminder: Philadelphia Masking Requirement**
- **NHSN Reporting Reminders and COVID-19 Bivalent Booster Resources**
- **“Antibiotic Awareness” in Long-Term Care, Featured Guest Speaker: Dr. Jerry Jacob, Penn Medicine**
- **Reminder: HAI/AR Program Services**

United States COVID-19 Cases and Deaths

US COVID-19 Weekly Case Rate per 100,000, by State/Territory



Daily Update for the United States

Cases

New Cases (Weekly Total)
280,711

Case Trends



Sep 2022 Nov 2022

Deaths

New Deaths (Weekly Total)
2,222

Death Trends



Sep 2022 Nov 2022

Hospitalizations

New Admissions (Daily Avg)
3,308

Admission Trends



Sep 2022 Nov 2022

Vaccinations

% 5+ with Updated Booster Dose
11.3%

People Age 5+



Total Cases
98,174,364

Total Deaths
1,073,115

Current Hospitalizations
21,208

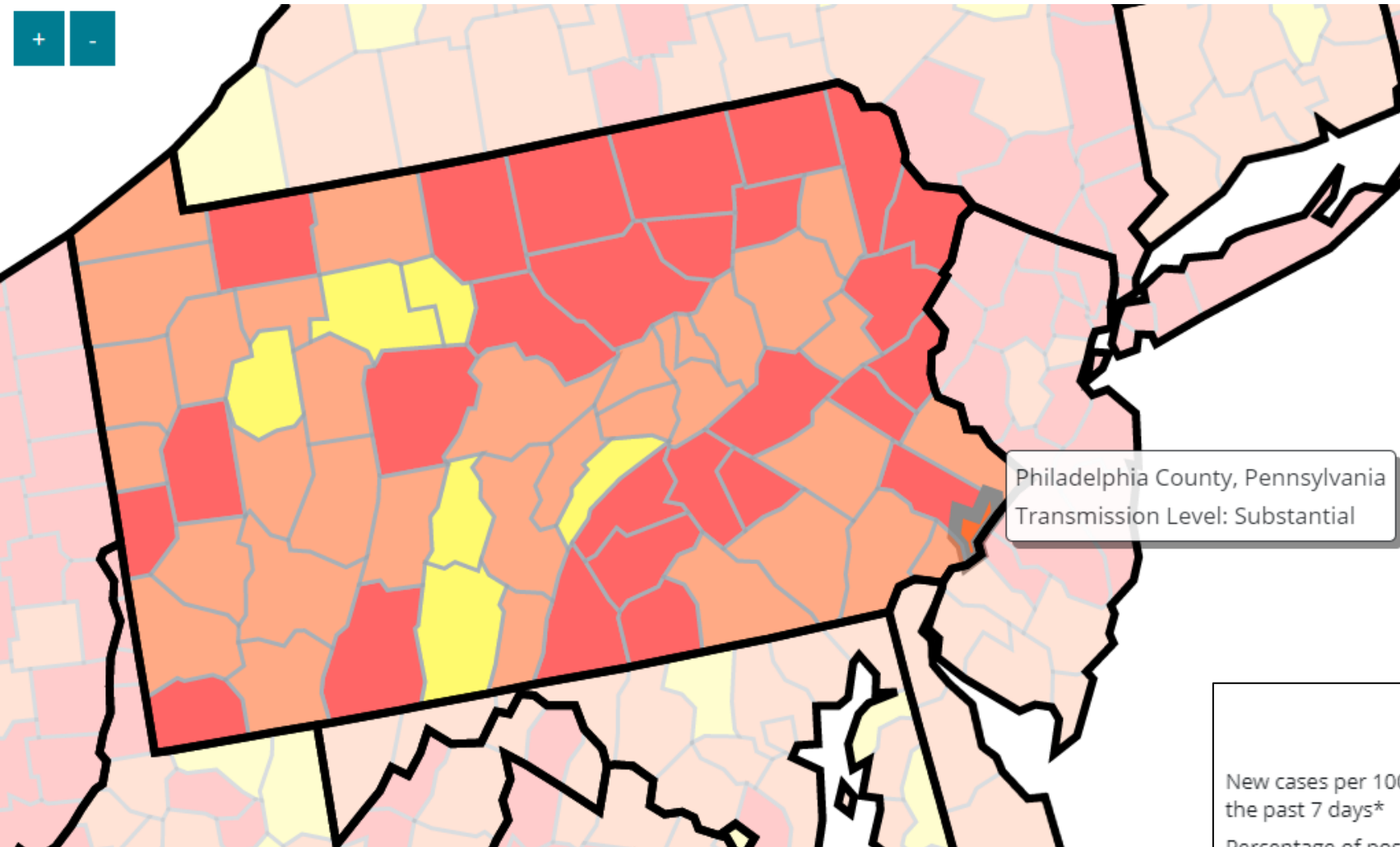
Total Updated Booster Doses (People 5+)
35,272,874

Pennsylvania, last 7 days:

- 9,787 new cases
- 76.4/100K
- PCR % Positivity: 8-9.9%

Community Transmission

Philadelphia



Data through Wed Nov 16 2022

Total Cases	930
Weekly Case rate per 100k	58.71
% Change in past week	-28.52

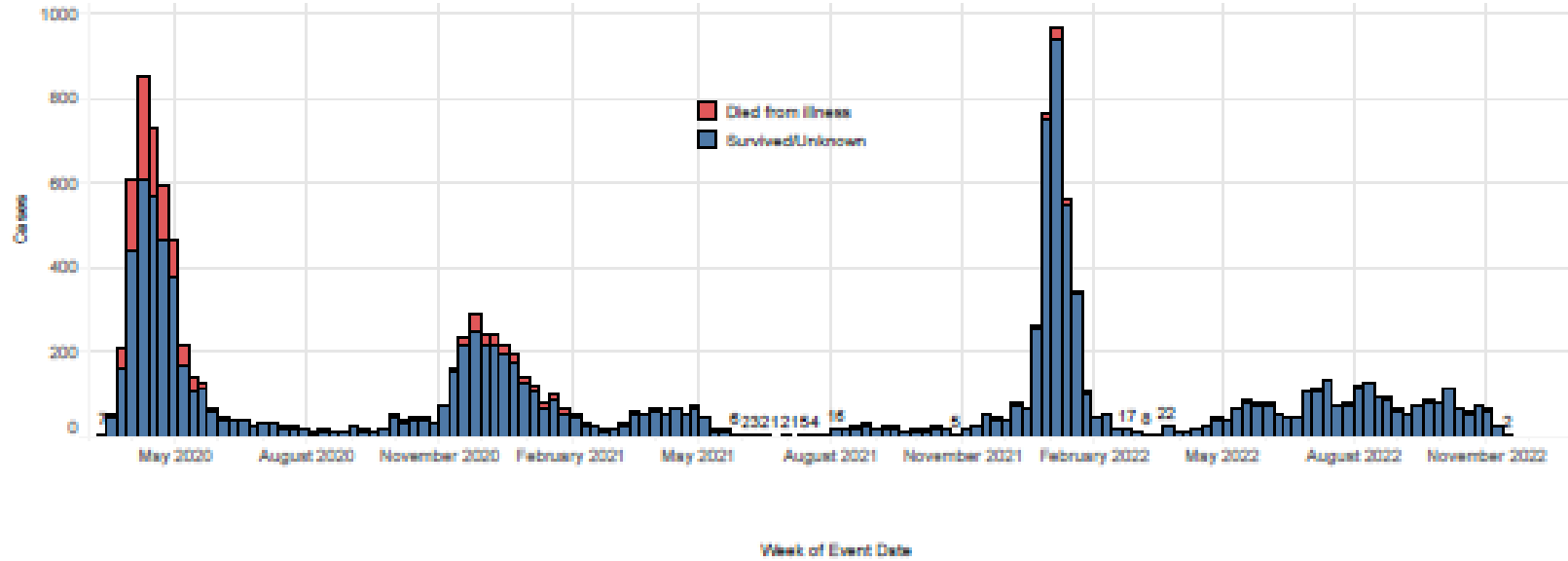
Data through Mon Nov 14 2022

% Positivity	6.98
% Change (last 7 days)	-1.19

	Low	Moderate	Substantial	High
New cases per 100,000 persons in the past 7 days*	<10	10-49.99	50-99.99	≥100
Percentage of positive NAATs tests during the past 7 days**	<5%	5-7.99%	8-9.99%	≥10.0%

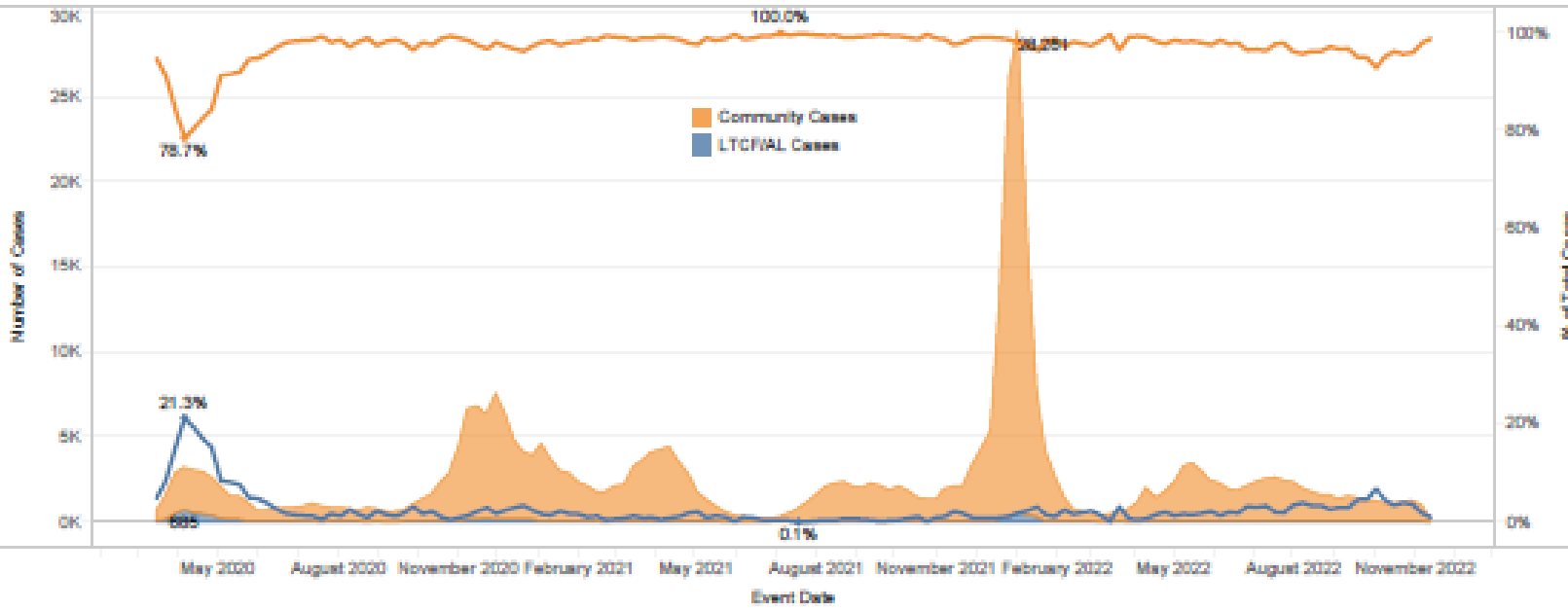
● High ● Substantial ● Moderate ● Low ● No Data

Licensed Long Term Care Facility Epi. Curve
 *All Cases (Confirmed & Probable) for Facility Type LTCF
 *Includes Staff who could live out of jurisdiction
 Updated: 11/15/2022



LTCF vs Community Cases

Note: Area represents count, line represents %



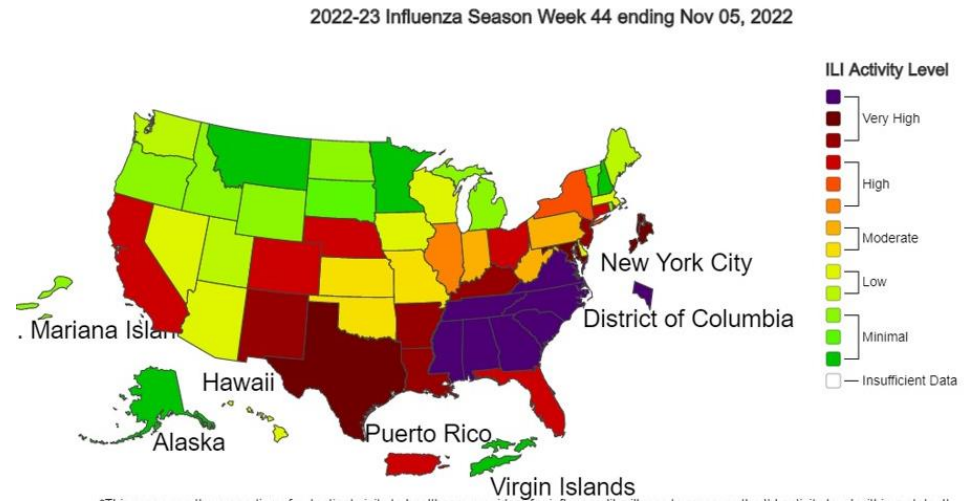
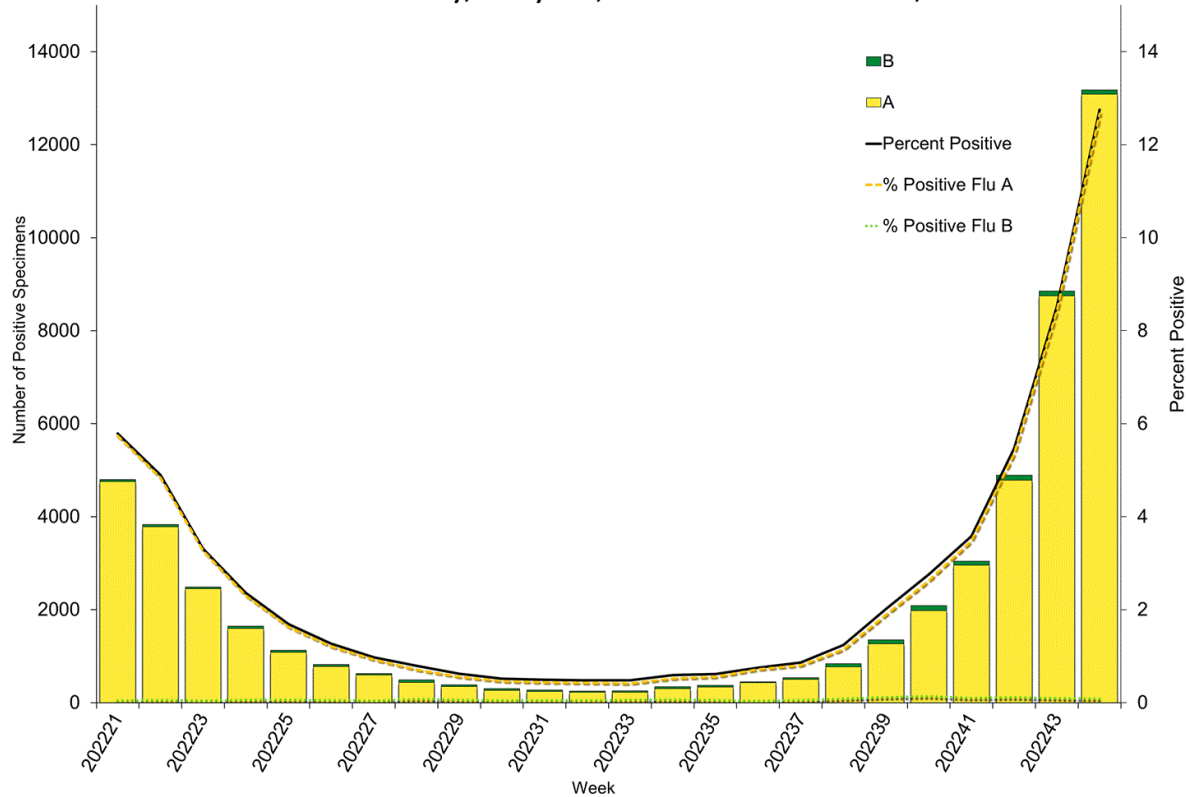
SEASONAL INFLUENZA IN LTCFS: TESTING AND INFECTION PREVENTION AND CONTROL CONSIDERATIONS

DANA PERELLA, MPH

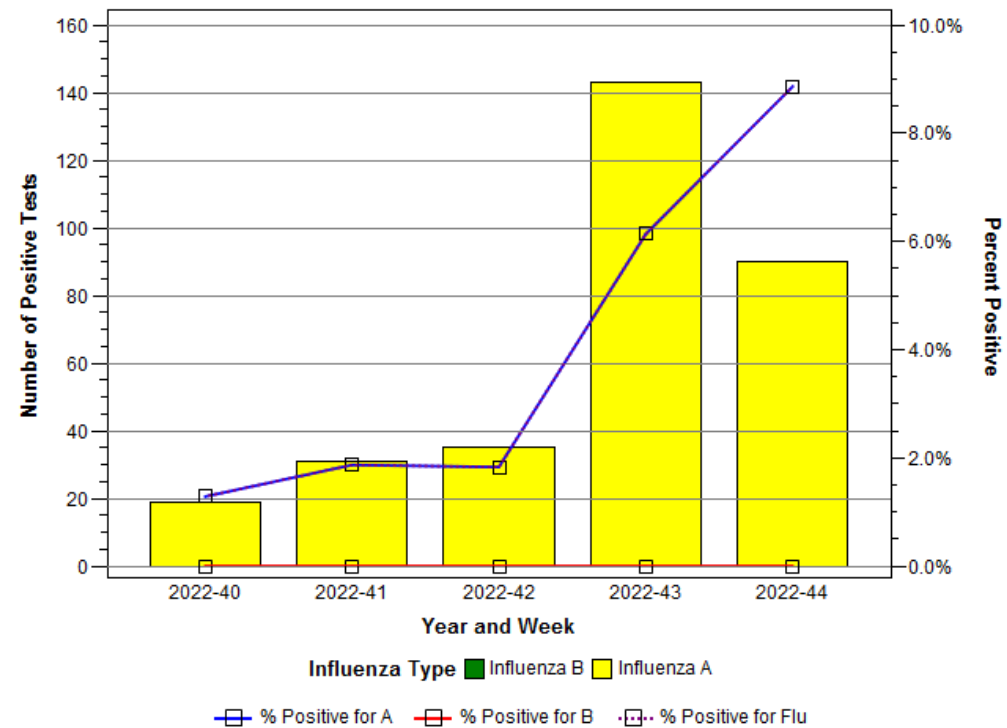
ACUTE COMMUNICABLE DISEASE PROGRAM, DIVISION OF DISEASE CONTROL

CURRENT INFLUENZA ACTIVITY IN THE US: 2022-2023 SEASON

Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, National Summary, May 22, 2022 – November 5, 2022



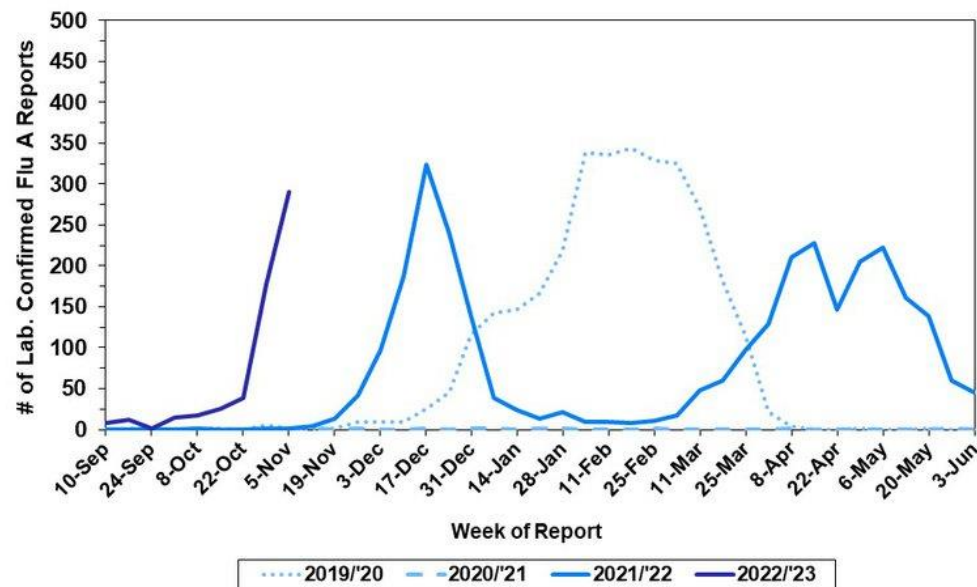
CURRENT INFLUENZA ACTIVITY IN PA: 2022-2023 SEASON



CURRENT INFLUENZA ACTIVITY IN PHILADELPHIA

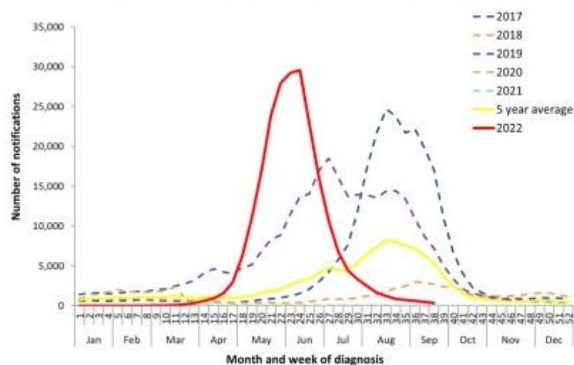
Laboratory-Based Surveillance for Influenza A Philadelphia, 2019/2020 through 2022/2023 Seasons*

**Based on select hospital laboratories participating in surveillance across respiratory virus seasons*

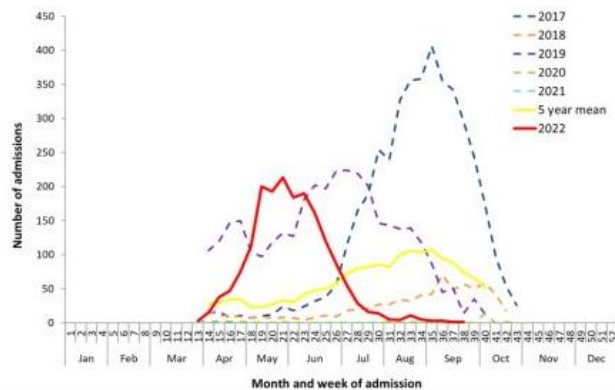


AUSTRALIA'S 2022 INFLUENZA SEASON

Notifications of laboratory-confirmed influenza, Australia, 01 January 2017 to 25 September 2022



Number of influenza hospitalizations at sentinel hospitals in Australia, from April to October (2017-2022)

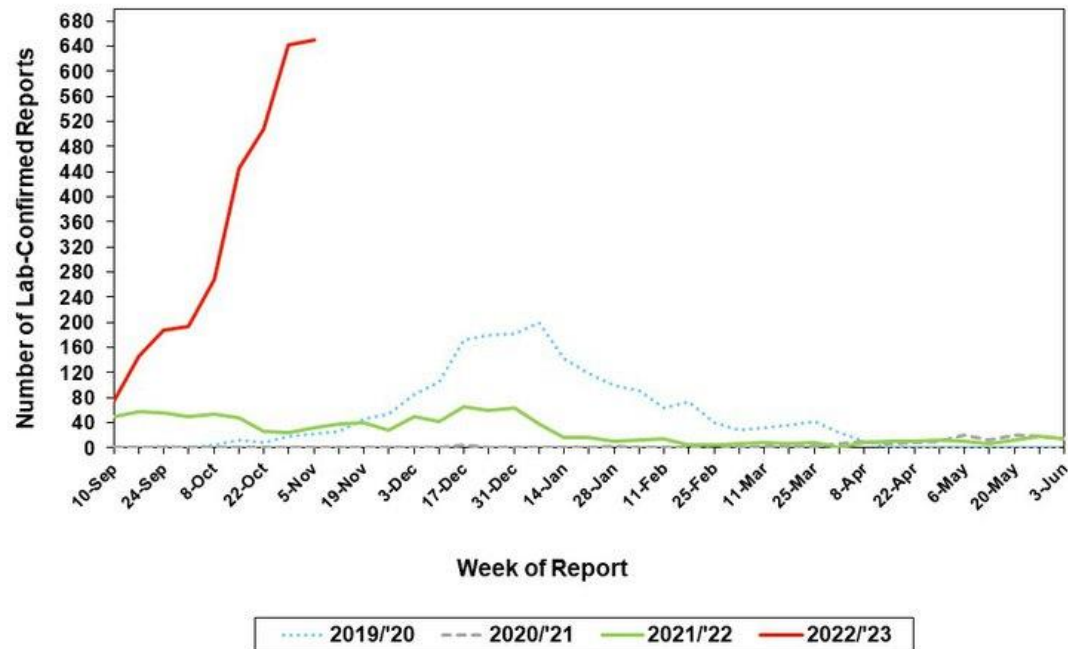


OTHER RESPIRATORY VIRUS ACTIVITY



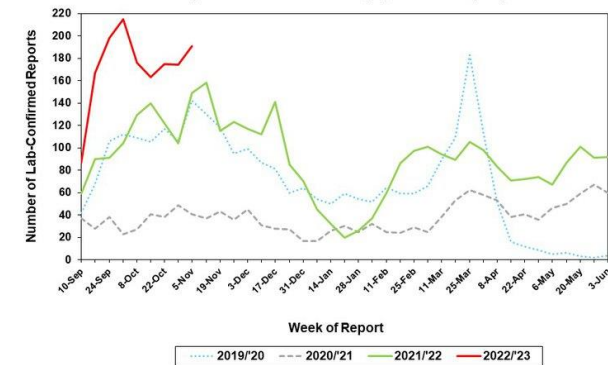
Laboratory-Based Surveillance for RSV (Counts) Philadelphia, 2019/2020 through 2022/2023 Seasons*

*Based on six hospital laboratories with RSV testing capabilities across respiratory virus seasons



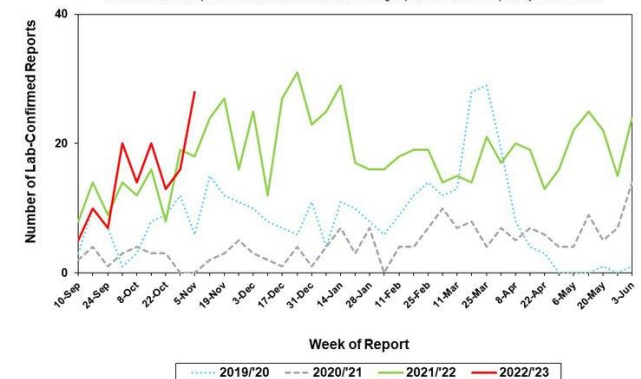
Laboratory-Based Surveillance for Rhinoviruses/Enteroviruses (Counts) Philadelphia, 2019/2020 through 2022/2023 Seasons

*Based on three hospital laboratories with Rhinovirus testing capabilities across respiratory virus seasons



Laboratory-Based Surveillance for Respiratory Adenovirus (Counts) Philadelphia, 2019/2020 through 2022/2023 Seasons

*Based on three hospital laboratories with Adenovirus testing capabilities across respiratory virus seasons



LONG TERM CARE FACILITY INFLUENZA OUTBREAKS

- What is considered an influenza outbreak?
 - One case of laboratory confirmed influenza in a LTCF
 - Suspected outbreak: Two or more residents ill with influenza-like illness (ILI) occurring within 72-hours, who are in close proximity to each other
 - Outbreak conclusion: considered 7 days after onset of last influenza case or two incubation periods after last case of respiratory illness
- LTCFs should call 215-685-6741 during business hours or report through their PDPH COVID Outbreak Response Coordinator

TESTING

- Since we are seeing co-circulation of these viruses in the community, consider testing symptomatic persons for both SARS-CoV-2, influenza, and other respiratory viruses.
- For residents or staff with acute respiratory illness:
 - Order multiplex nucleic acid detection assay for influenza and SARS-CoV-2
 - Single-plex is okay if multiplex not available (might need two respiratory specimens)
 - Molecular tests for influenza have better sensitivity and are recommended over antigen tests
 - False negative results may occur with rapid antigen tests for influenza
- PDPH can assist with respiratory panel testing of NP swabs for residents who are SARS-CoV-2 and influenza negative

RESPONSE TO INFLUENZA CASES DURING THE COVID PANDEMIC

- Place symptomatic residents in Transmission-Based Precautions using all recommended PPE for care of a resident with suspected SARS-CoV-2 infection
- Test any resident with symptoms of COVID-19 or influenza for both viruses
- Placement Decisions
 - Residents confirmed to have SARS-CoV-2 infection should be placed in a single room if available or if numerous residents are simultaneously identified to have known SARS-CoV-2 exposures or symptoms concerning for COVID-19, residents should remain in their current location.
 - Residents confirmed with influenza only should be placed in a single room, if available, or housed with other residents with only influenza. If unable to move a resident, he or she could remain in the current room with measures in place to reduce transmission to roommates (e.g., physical barriers, antiviral chemoprophylaxis).
 - For those with influenza only, use droplet and standard precautions with eye protection.
 - Residents with symptoms of acute respiratory illness who are determined to have neither SARS-CoV-2 infection nor influenza should be cared for using Standard Precautions and any additional Transmission-Based Precautions based on their suspected or confirmed diagnosis

ANTIVIRAL USE IN RESPONSE TO INFLUENZA CASES

- Antiviral Treatment for Influenza Cases
 - Antiviral treatment can reduce the severity and duration of influenza illness.
 - Treatment should be initiated within 2 days of symptom onset; however, it is still beneficial when given later in the course of progressive illness.
- Antiviral Chemoprophylaxis for Persons Exposed to Influenza
 - Antiviral prophylaxis with oral oseltamivir or baloxavir should be started as early as possible in all eligible exposed residents (who have no contraindications), and residents on outbreak-affected units, regardless of vaccination status.
 - Chemoprophylaxis should continue for at least 2 weeks, until 7 days after the onset of illness in the last known case.
 - Chemoprophylaxis should be offered to staff that are unvaccinated or have underlying medical conditions. Staff members who are initially vaccinated at the time of an outbreak, and have no underlying conditions, require chemoprophylaxis only for the 2-week period following vaccination.

OTHER MEASURES

- Promote influenza vaccination among residents and staff.
 - Flu vaccine can be co-administered with COVID-19 bivalent boosters
- Encourage good hand hygiene and covering coughs and sneezes
- Routinely clean commonly used objects and surfaces
- Continue COVID-19 masking and distancing
 - Still required for healthcare facilities in Philadelphia
- Ensure staff and visitors stay home if sick

INFLUENZA RESOURCES

- Influenza Guidance (Patient Placement, Testing, and Clinical Management)
 - CDC Influenza Outbreak Management in LTC and Post-Acute Care Facilities: <https://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-guidance.htm>
 - CDC Testing and Management Considerations for Nursing Home Residents with Acute Respiratory Symptoms when SARS-CoV-2 and Influenza Viruses are Co-circulating: <https://www.cdc.gov/flu/professionals/diagnosis/testing-management-considerations-nursinghomes.htm>
 - CDC COCA Call: 2022-2023 Seasonal Influenza Testing and Treatment During the COVID-19 Pandemic (Free CME): https://emergency.cdc.gov/coca/calls/2022/callinfo_111522.asp

RESPIRATORY SURVEILLANCE RESOURCES

- Influenza Activity Updates
 - Philadelphia: <https://hip.phila.gov/data-reports-statistics/influenza/>
 - Pennsylvania: <https://www.health.pa.gov/topics/disease/Flu/Pages/2022-23-Flu.aspx>
 - United States: <https://www.cdc.gov/flu/weekly/fluactivitysurv.htm>
- Other Respiratory Virus Activity Updates
 - Philadelphia: <https://hip.phila.gov/data-reports-statistics/otherrespiratoryviruses/>
 - United States: <https://www.cdc.gov/surveillance/nrevss/index.html>

Guidance Reminder

Philadelphia Board of Health Mask Requirements-10.13.22



CITY OF PHILADELPHIA
DEPARTMENT OF PUBLIC HEALTH

BOARD OF HEALTH: 10/13/2022
LAW DEPARTMENT:
RECORDS DEPARTMENT:

**FOURTH CONSOLIDATED AND RESTATED
SUPPLEMENTAL REGULATION GOVERNING
THE CONTROL AND PREVENTION OF COVID-19
(REVISED SAFETY MEASURES AND DELEGATION OF AUTHORITY)**

(A) Face Coverings Required.

(a) Healthcare Institutions, as defined in the Emergency Regulation Governing the Control and Prevention of COVID-19 Mandating Vaccines for Healthcare Workers and In Higher Education, Healthcare, and Related Settings, as it has been or shall be further amended, (“Healthcare Vaccine Mandate”), including temporary indoor community healthcare events such as vaccine clinics and blood drives, except when in an area restricted to only employees. Provided, however, that when an employee returns to work following a high-risk exposure or testing positive for COVID such employee shall mask consistent with Center for Disease Control guidance in all areas, including those restricted to only employees.

(b) Congregate facilities such as prisons, shelters, and adult day programs.



Department of
Public Health

CITY OF PHILADELPHIA

NHSN Reminders and Booster Resources

NHSN Updates

Up to date with COVID-19 vaccines (*Please note that changes for **Quarter 4 2022** are highlighted in yellow.*)

*Individuals are considered up to date with their COVID-19 vaccines during the surveillance period of **September 26, 2022 – December 25, 2022** for the purpose of NHSN surveillance if they meet (1) of the following criteria:*

Received an **updated (bivalent)* booster dose,**

or

- a) Received their **last booster** dose **less than 2 months ago,** or
- b) Completed their **primary series** **less than 2 months ago**

* The updated (bivalent) Moderna and Pfizer-BioNTech boosters target the most recent Omicron subvariants. The updated (bivalent) boosters were recommended by the CDC on 9/2/2022. As of this date, the original, monovalent mRNA vaccines are no longer authorized as a booster dose for people ages 12 years and older.

Note: Up to date guidance for individuals ages 11 years and younger differs; please see [Stay Up to Date with COVID-19 Vaccines Including Boosters](#) for details.

Note: the NHSN surveillance definition for up to date is now the same regardless of immunocompromised status.

COVID-19 Booster Posters

New COVID-19 Bivalent Boosters: What you need to know



As COVID-19 spreads it changes and can become more contagious. Getting the most up-to-date booster can help protect you from the most common COVID-19 variants.

What is a bivalent booster and why is it different than the other boosters?

The new bivalent booster has a combination of the original booster plus updated protection against the types of COVID-19 that are most common now.

Why should I get yet another vaccine?

As viruses spread, they change, and this is expected. COVID-19 will likely continue to spread around the world and may become as common as the flu. Getting updated boosters help your body build protection against new versions of the virus.

Who should get the updated booster?

- Everyone who is eligible should get a booster. People who are 50+ and anyone who is immunocompromised should also make sure to get a booster.
- Pfizer bivalent booster: people 12 years and older, at least 2 months after their primary series or 2 months since receiving the most recent booster dose.
- Moderna bivalent booster: people 18 years and older, at least 2 months after completion of the primary series or 2 months since receiving the most recent booster dose.

Does it matter which version of the booster shot I take?

It is fine to mix brands. You do not have to get the same vaccine you got for your primary series or other boosters. Both provide similar amounts of protection.

If I had COVID-19 in the last 90 days, do I need to wait to get my booster?

It is okay to get a booster within 90 days of having COVID-19 but waiting closer to 90 days can give you a better immune response. You can get COVID-19 more than once, so it is important to get a booster even if you had COVID-19.

For more information visit:
<https://bit.ly/COVIDboosterPHL>



Why should I get a COVID-19 booster?

- 1 Boosting helps protect against newer variants like Omicron
- 2 Everyone benefits from updated COVID-19 boosters...
 - ✓ Even for people who have had COVID already
 - ✓ And even for people who already got boosted
- 3 Boosters help protect people around us



? What are the new boosters?

Monovalent shot: original booster
Bivalent shot: new, updated booster protecting against more COVID strains

The bottom line: **Boosters energize your immune system** to improve protection against COVID-19. You should get boosted to protect yourself and those around you.

When can I get a COVID-19 booster?

It depends on your age and whether you have finished a full ("primary") vaccine series. Find your age group in the graphic below. This graphic only applies to people that completed their primary series.



6 months-4 years

Booster not yet available for this group



5 years and older

Eligible for 1 updated (bivalent) booster, at least 2 months after most recent COVID-19 vaccine



For more information on boosters, visit:
COVID19LearningNetwork.org

COVID-19 Real-Time Learning Network
Brought to you by CDC and AIDS



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10/14/2022

Long Term Care **RISE**



“Antibiotic Awareness” in Long-Term Care

Philadelphia Department of Public Health Long-Term Care Collaborative Call

Jerry Jacob, MD, MS
Assistant Professor of Clinical Medicine
Division of Infectious Diseases
Penn Medicine



**U.S. ANTIBIOTIC
AWARENESS WEEK**
November 18–24, 2022
www.cdc.gov/antibiotic-use

Case

- ▶ 92 yo female nursing home resident with Alzheimer's disease, severe arthritis, and depression develops dark urine over the weekend
 - On-call physician notified → urine culture requested and ordered
 - Afebrile, normal vitals, no urinary catheter in place
- ▶ 2 days later, primary physician called with results
 - Urinalysis: moderate WBCs, 1+ nitrites; Urine culture: >100,000 CFU of gram-negative rod
 - Ciprofloxacin is ordered for a 7 day course
- ▶ One week later, resident continues to have dark urine
 - No fever or other symptoms
 - Resident's family now requests a repeat urine to make sure the infection has resolved

Audience Question #1

▶ Which of the following statements regarding this case is true?

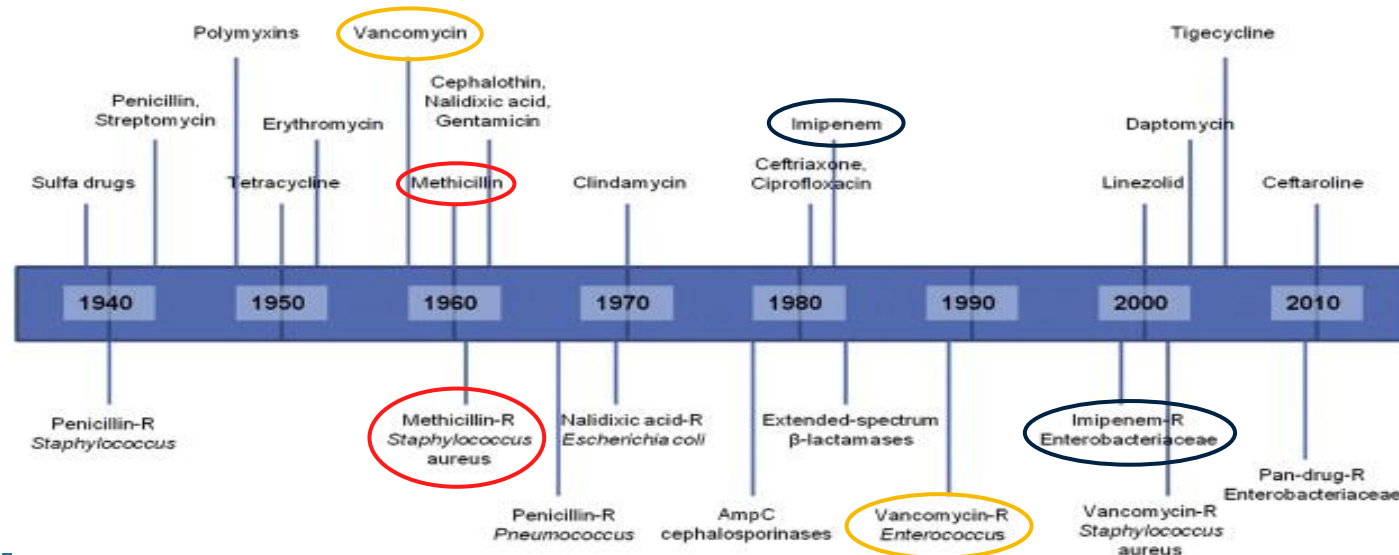
- A. Minimum antibiotic duration for a UTI is 7 days
- B. Urine studies should be repeated at the end of antibiotic course to make sure infection is cured
- C. If a bacteria grows in the urine culture, it means there is an infection
- D. Dark urine is a common symptom for UTIs in the elderly
- E. Risks of not treating an elderly resident with a positive urine culture outweigh any risks from antibiotic use
- F. None of the above

The Problem

- ▶ Antibiotics have saved countless lives
- ▶ However, widespread antibiotic use has led to:
 - Antibiotic resistance
 - *C. difficile* infections
 - Adverse drug effects including drug-drug interactions
- ▶ A substantial amount of antibiotic use in the community is unnecessary

Drug Discovery

Drug Resistance



CDC's Urgent Threats: *C. difficile*

CLOSTRIDIOIDES DIFFICILE

THREAT LEVEL **URGENT**

223,900
Estimated cases in hospitalized patients in 2017

12,800
Estimated deaths in 2017

\$1B
Estimated attributable healthcare costs in 2017

Clostridioides difficile (*C. difficile*) bacteria can cause life-threatening diarrhea. Infections occur most often in people who have taken antibiotics for other conditions. It is the most common healthcare-associated infection.

WHAT YOU NEED TO KNOW

- While healthcare-associated *C. difficile* cases are decreasing, community-associated cases are not.
- Strategies to reduce *C. difficile* infections include improving antibiotic use, infection control, and healthcare facility cleaning and disinfection.
- *C. difficile* infections are more common and tend to be more severe in older patients.

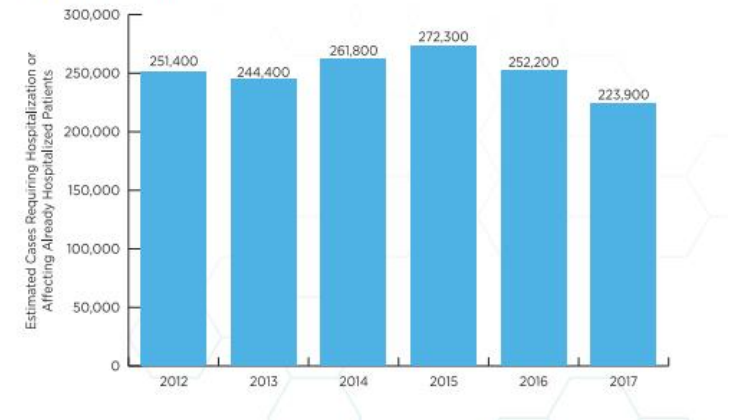
Previously *Clostridium difficile*. Also called *C. diff*. Cost includes hospital-onset cases only.



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

CASES OVER TIME

Continued appropriate infection control, antibiotic use, and diagnostic testing are important to maintain decreases in *C. difficile* cases.



CDC's Urgent Threats: *Candida auris*

DRUG-RESISTANT **CANDIDA AURIS**

THREAT LEVEL **URGENT**

323 Clinical cases in 2018

90% Isolates resistant to at least **one** antifungal

30% Isolates resistant to at least **two** antifungals

Candida auris (*C. auris*) is an emerging multidrug-resistant yeast (a type of fungus). It can cause severe

Department of Public Health
CITY OF PHILADELPHIA

**Philadelphia Department of Public Health
Division of Disease Control**

CHERYL BETTIGOLE, MD, MPH
Health Commissioner

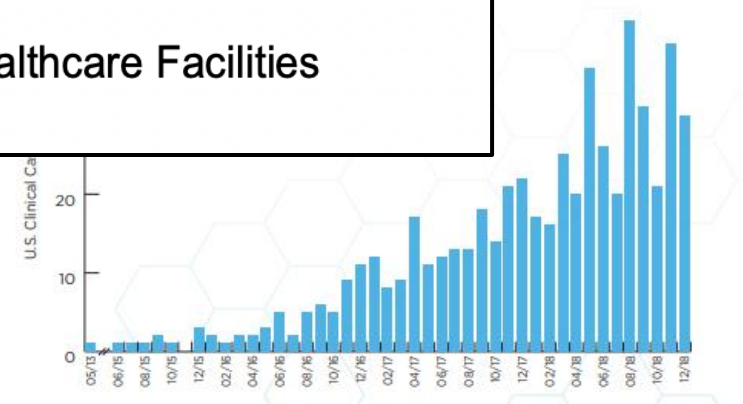
SHARA EPSTEIN, MD
Medical Director, Division of Disease Control

COLEMAN TERRELL
Director, Division of Disease Control

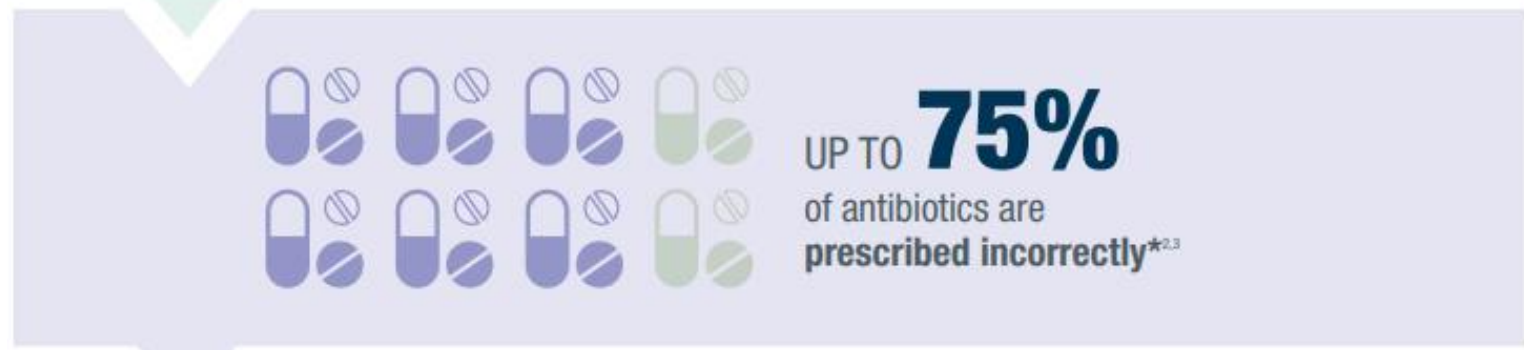
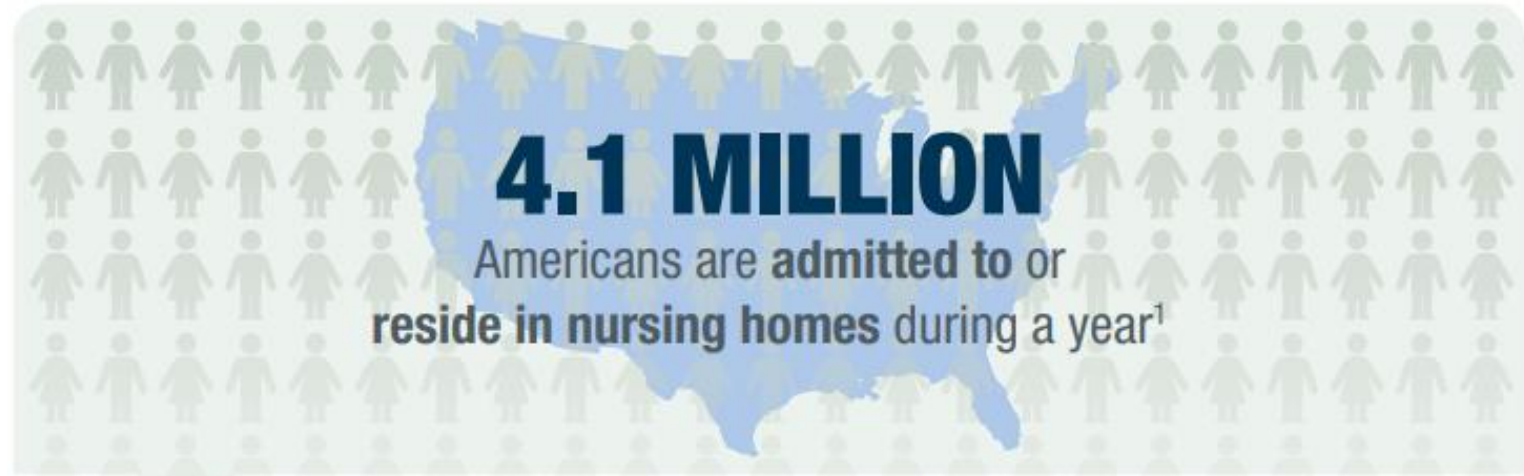
Health Update

Update: Outbreak and Containment of *Candida auris* in PA Healthcare Facilities
August 8, 2022

- Can be carried on patients' skin without causing infection, allowing spread to others
- Data represents U.S. cases only. Isolates are pure samples of a germ.



Antibiotic Use in Nursing Homes



*incorrectly = prescribing the wrong drug, dose, duration or reason

1. AHCA Quality Report 2013.
2. Lim CJ. Clin Interv Aging. 2014
3. Nicolle LE. Infect Control Hosp Epidemiol 2000; 21:537–45.

Negative Impact of Antibiotic Use in Nursing Homes



Cost-estimates of antibiotics in nursing homes range from

\$38 million to
\$137 million
per year.¹



Residents in nursing homes with higher antibiotic use have a

24%
increased risk
of antibiotic-related harm.²



In nursing homes with higher antibiotic use,

even residents who do not receive antibiotics are at increased risk

of indirect antibiotic-related harms due to the spread of resistant bacteria or *C. difficile* germs from other patients.²

Antibiotic Stewardship

- ▶ The **right antibiotic**, at the **right dose**, for the **right duration**, at the **right time**
- ▶ Antibiotics are unique drugs because they impact not just the resident, but also the community around the resident
- ▶ Multi-faceted effort requiring more than just education or antibiotic expertise



CMS Regulations

- ▶ **“CMS Reform of Requirements for LTCFs”** implemented Nov 28, 2017

§ 483.80 Infection control.

The facility must establish and maintain an infection prevention and control program designed to provide a safe, sanitary, and comfortable environment and to help prevent the development and transmission of communicable diseases and infections.

(a) Infection prevention and control program. The facility must establish an infection prevention and control program (IPCP) that must include, at a minimum, the following elements:

(3) An antibiotic stewardship program that includes antibiotic use protocols and a system to monitor antibiotic use.

- ▶ **F-tag 881** provides detailed guidance for surveyors to ensure the elements of an appropriate antibiotic stewardship program in place

CDC Core Elements for Antibiotic Stewardship in Nursing Homes



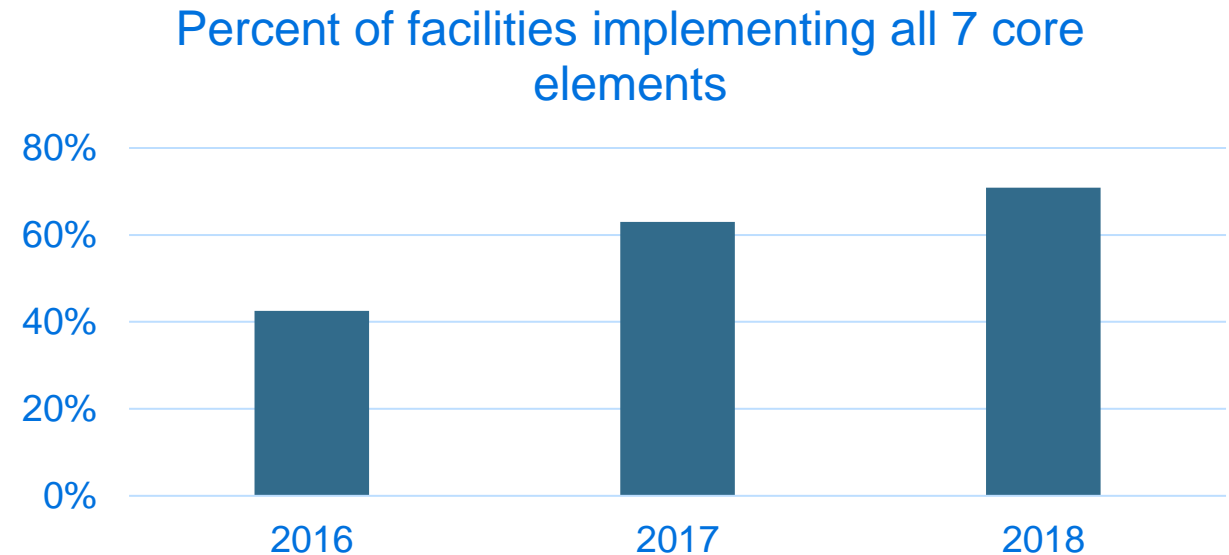
Audience Question #2

- ▶ **Which of the following elements do you believe offers the greatest opportunity to improve antibiotic stewardship in long term care facilities?**

- A. Education for residents and families on appropriate antibiotic use
- B. Standardized protocols and policies (e.g., minimum use criteria) for antibiotic use
- C. Availability of antibiotic expertise from an external consultant
- D. Increased accountability and/or leadership support for stewardship efforts
- E. Education for staff regarding when and how to obtain cultures, and when to treat with antibiotics

Positive Trend in Implementation of Core Elements - NHSN

- ▶ Percent of facilities implementing all 7 core elements increased by 28% between 2016 and 2018
- ▶ Greatest increases in education, reporting, and drug expertise
- ▶ Nursing homes with at least 20 hours of IPC activity per week were 14% more likely to implement all 7 core elements



Antibiotic Stewardship: PDPH & LTC RISE Partnership

THANK YOU to all facilities that participated!

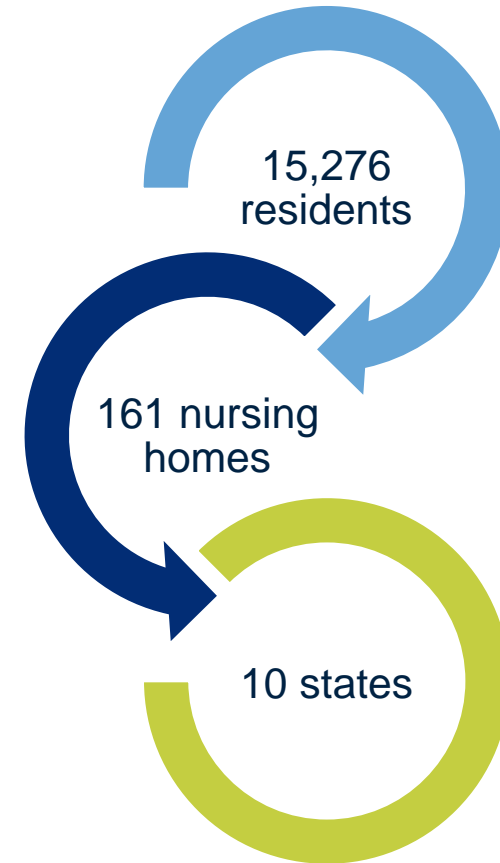
- ▶ 38 facilities, 81% response rate
- ▶ Facility customized reports sent earlier this week

55% of all facilities that responded met *all* core elements of a SNF antibiotic stewardship program!



Targeting QI Efforts

- ▶ 2017 point prevalence survey
 - **Abx use more common** in following residents
 - admitted for **short stays** after post-acute care
 - **central venous catheter** in place
 - indwelling **urinary catheter** in place
 - **UTI** was the most common indication
 - **18%** of antibiotics were for **prophylaxis**, typically urinary
 - **Fluoroquinolones** (e.g., ciprofloxacin, levofloxacin) were most common antibiotic class
 - **33%** of antimicrobials were **broad spectrum antibiotics**



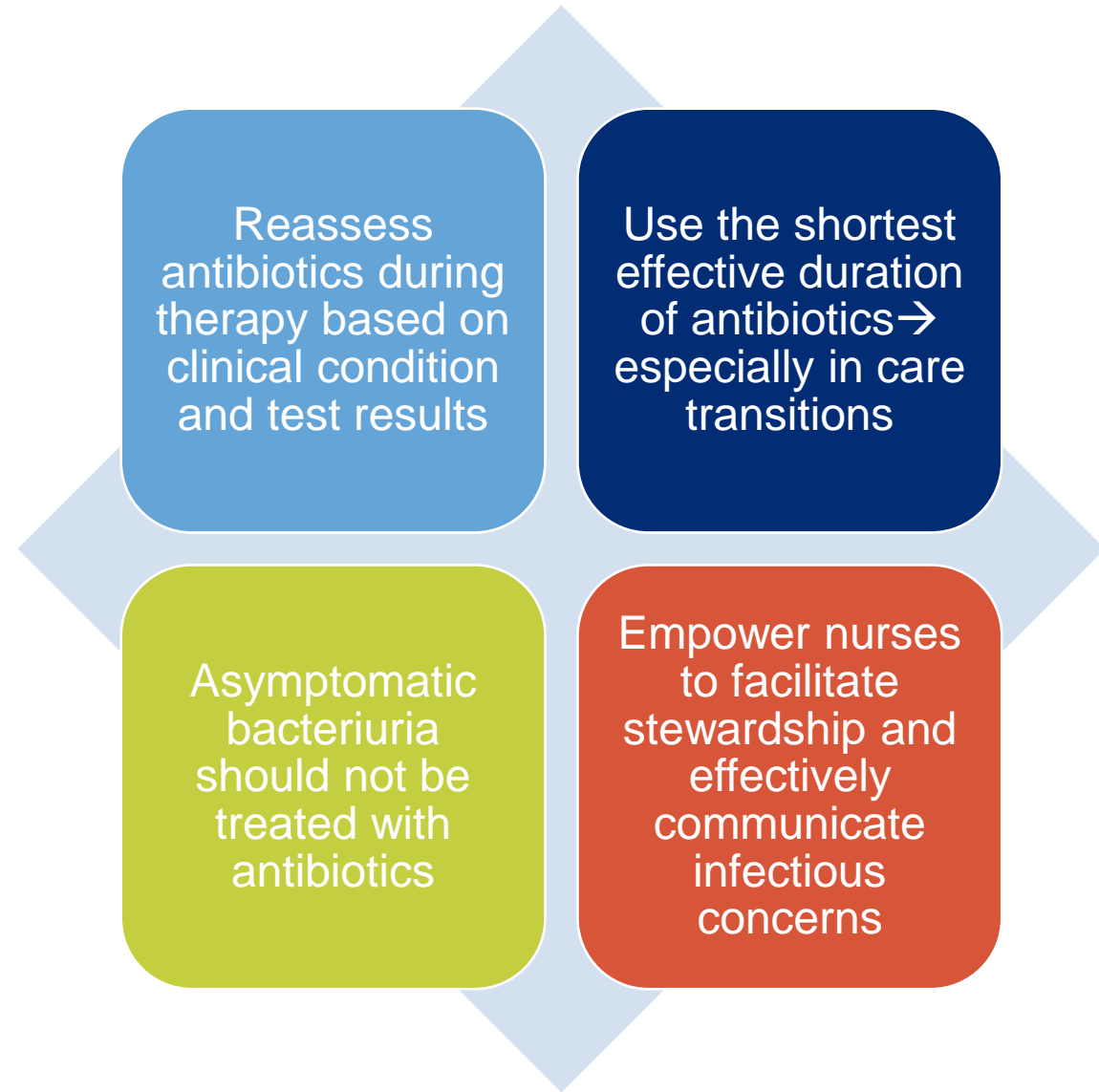
Audience Question #3

- ▶ Which of the following myths is most likely to be driving unnecessary antibiotic use in skilled nursing facilities?
 - A. Minimal antibiotic duration for a UTI is 7 days
 - B. Urine studies should be repeated at the end of antibiotic course to make sure infection is cured
 - C. If a bacteria grows in the urine culture, it means there is an infection
 - D. Dark urine is a common symptom for UTIs in the elderly
 - E. Risks of not treating an elderly resident with a positive urine culture outweigh any risks from antibiotic use
 - F. Other – please write into chat

Returning to our case...

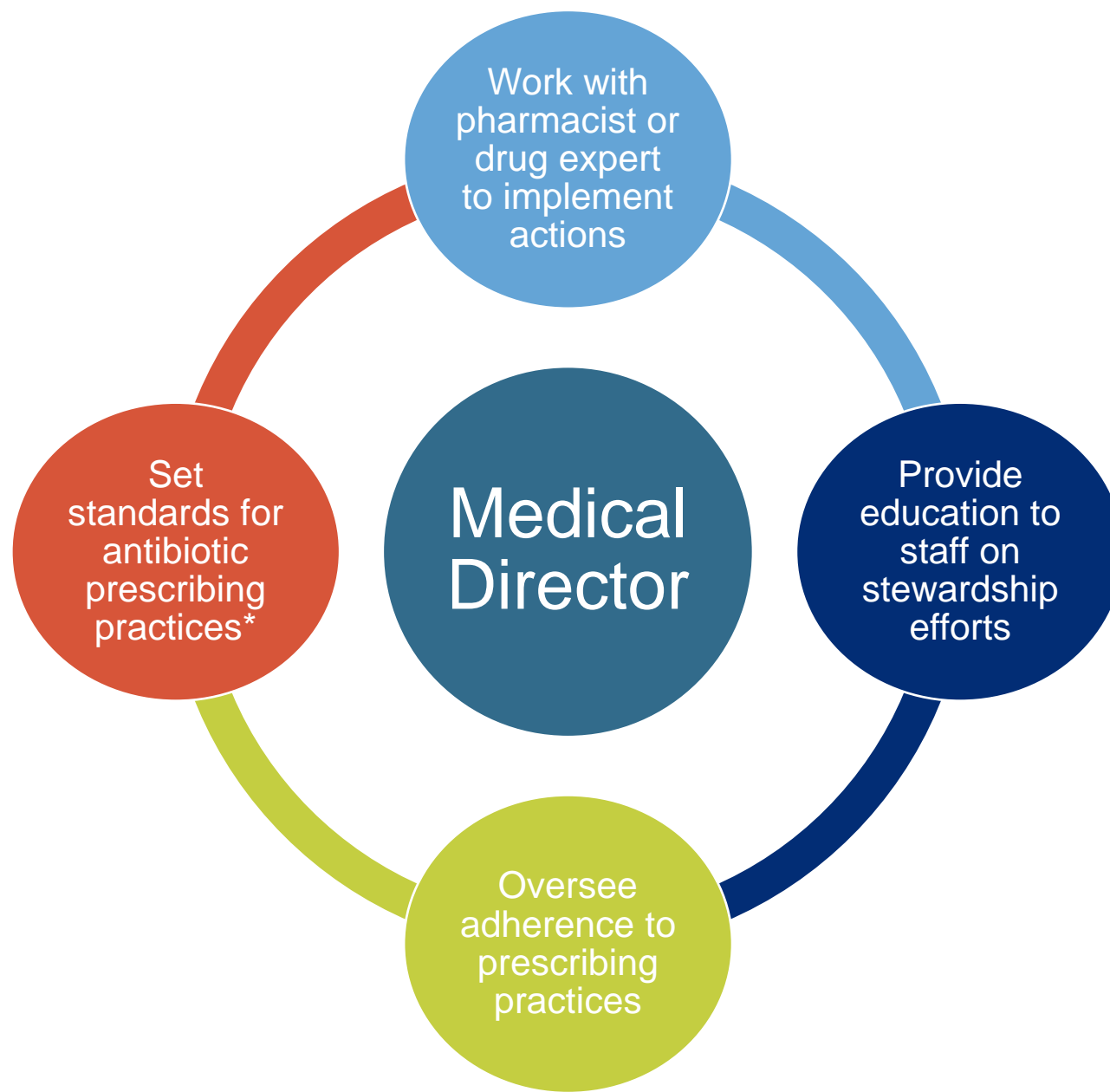
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 - Afebrile, normal vitals, no urinary catheter in place
- ▶ 2 days later, primary physician called with results
 - Urinalysis: moderate WBCs, 1+ nitrites; **Urine culture: >100,000 CFU of gram negative rod**
 - **Ciprofloxacin** is ordered for a **7 day** course
- ▶ One week later, resident continues to have dark urine
 - No fever or urinary symptoms
 - Resident's family now requests "a **repeat urine to make sure the infection has resolved**"

Key stewardship strategies for long-term care



“Nurses are antibiotic first responders, central communicators, coordinators of care, as well as 24-hour monitors of patient status, safety, and response to antibiotic therapy.”





***right drug, right dose, right duration, right time**



Takeaways

- ▶ Antibiotics are unique and powerful tools that impact both the resident and the community
- ▶ Seven core elements form the foundation for a SNF antibiotic stewardship program:
 - Leadership commitment
 - Accountability
 - Actions to improve use
 - Drug Expertise
 - Tracking
 - Reporting
 - Education
- ▶ Stewardship QI opportunities may be increased in:
 - Short stay/post-acute residents
 - UTI treatment and “prophylaxis”
 - Fluoroquinolone use
- ▶ Key strategies for SNFs include:
 - Reassessing antibiotic choice and duration based on clinical condition and culture results
 - Using the shortest effective duration, especially in care transition
 - Avoiding treatment for asymptomatic bacteriuria
 - Empowering nurses to facilitate stewardship and effectively communicate infectious concerns



Reminder: HAI Services

- N95 qualitative fit test training
- Onsite Education
- Infection Control and Response (ICAR) visits
- Newsletter
 - Next issue in mid-November!

[Sign-Up Form for HAI/AR Services](#)





Department of
Public Health

CITY OF PHILADELPHIA

Thank you!

Next call Friday, December 16, 2022