

A PARTNERSHIP IN REDUCING ANTIMICROBIAL RESISTANCE THROUGH ANTIMICROBIAL STEWARDSHIP

Candida auris: Threats of an Emerging Fungus

By: Jenna Sinkevitch, MSPH

Candida auris is a fungus that can cause serious illness or death in hospitalized patients. It is multi-drug resistant, sometimes to all three available classes of antifungals, making it difficult or impossible to treat. Patients at the greatest risk for infection are those with long healthcare stays, those with indwelling lines or tubes, and those with previous antibiotic or antifungal use (CDC 2019). *C. auris* easily spreads from person to person and can persist in the environment for weeks. (Page 2)

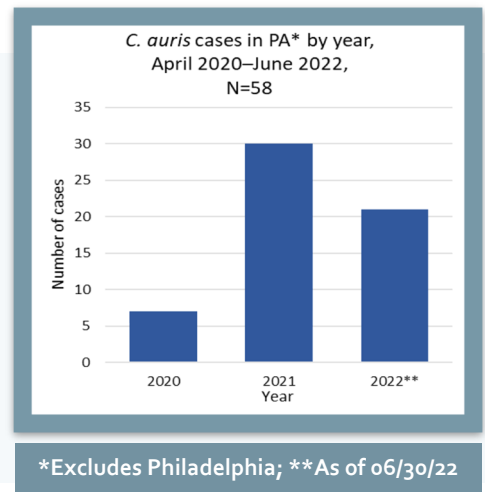
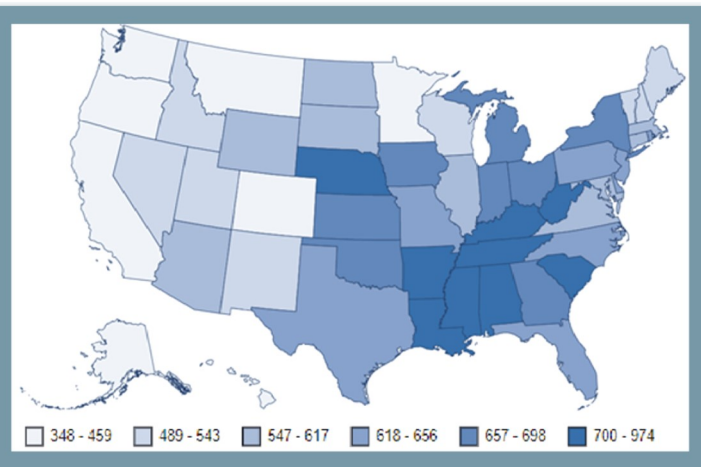


Figure 1: 2020 Outpatient Antibiotic Dispensing Rate (per 1,000 persons per year) by State



National and Pennsylvania Outpatient Antibiotic Use

By: Christine L Mulgrew MPH, PhD

A goal of the 2020-2025 [National Action Plan for Combating Antibiotic-Resistant Bacteria](#) is to reduce use of outpatient antibiotic prescriptions. This is also a goal within the Pennsylvania Healthcare-associated Infection Prevention and Antimicrobial Stewardship (HAIP/AS) program. (Page 3)

New Guidelines for Reprocessing Flexible and Semi-rigid Endoscopes

By: Cara Bicking Kinsey PhD, MPH, RN, CIC

As endoscopes are often implicated in outbreaks involving multidrug-resistant organisms, both with and without identified reprocessing failures (Deb, et al., 2022; Potron, et al., 2017; Schelenz, et al., 2000), experts continue to refine and improve reprocessing practices, strategies, and recommendations. (Page 4)

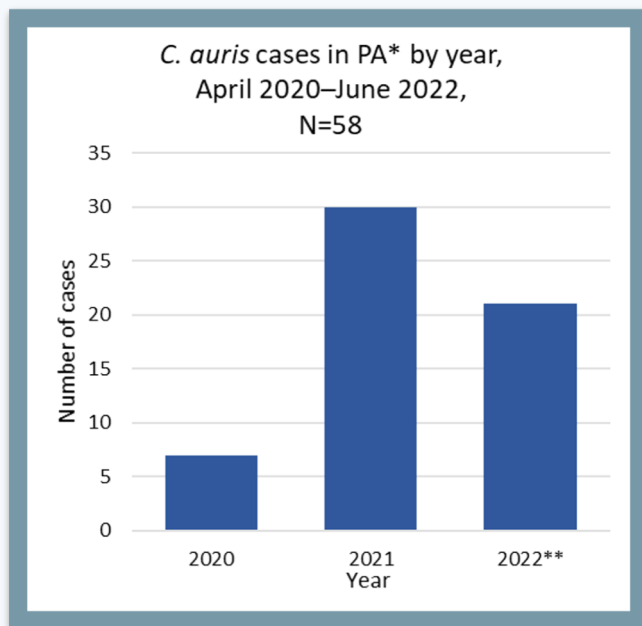


Candida auris: Threats of an Emerging Fungus (continued)

By: Jenna Sinkevitch, MSPH

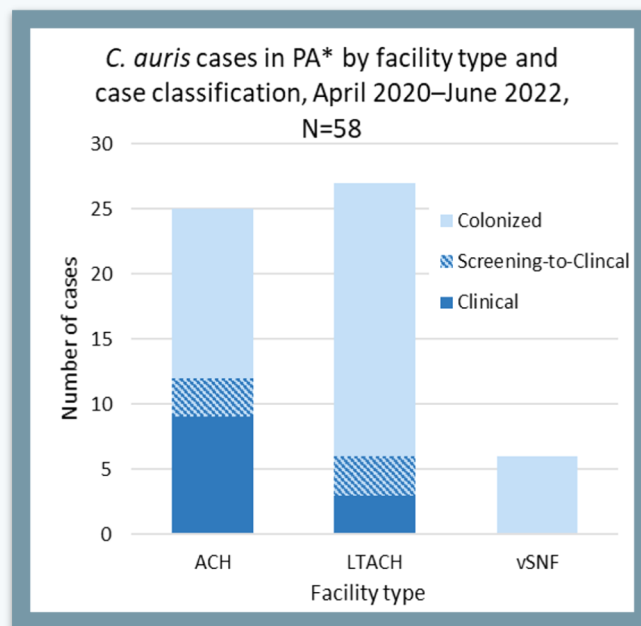
Patients can be colonized with *C. auris* for months with no symptoms but can still infect people or contaminate objects around them, allowing the fungus to spread (CDC 2021). In Pennsylvania, there have been 58 total *C. auris* cases since April 2020 (Figure 1). All cases were identified in patients with recent inpatient admission to a healthcare facility (Figure 2).

Figure 1



*Excludes Philadelphia; **As of 06/30/22

Figure 2



ACH=acute care hospital, LTACH = long term acute care hospital, vSNF=ventilator-equipped skilled nursing facility

*Excludes Philadelphia; **As of 06/30/22

Stopping the Spread

Preventing and containing *C. auris* is possible with proper infection prevention and control measures within healthcare facilities. Guidelines from the [Healthcare Facility Toolkit for Response to Candida auris](#), [Public Health Toolkit for Response to Candida auris](#), and [CDC Candida auris Guidelines](#) should be followed. Utilizing all aspects of infection control together are key to preventing *C. auris* transmission.

Hand Hygiene

Hand hygiene should be performed frequently following [CDC Hand Hygiene in Healthcare Settings](#)² guidelines and the [PA DOH poster](#).

Contact Precautions

Keep case-patients on contact precautions or [enhanced barrier precautions](#) (nursing homes only) and place them in a private room.

Disinfection & Terminal Cleaning

An EPA-registered disinfectant from [List P](#) should be used for surfaces in rooms where case-patients will reside or previously occupied.

Routine Auditing

Use an auditing tool to monitor staff adherence to infection control measures using regular audits for [hand hygiene](#) and [environmental cleaning](#).

Targeted Screening

Conduct point-prevalence screenings based on recommendations from the Department of Health (e.g., roommates and units with exposure).

Education

Educate all staff upon hire, at least annually, and when there are policy updates. Focus on hand hygiene, environmental disinfection, and contact precautions.

National and Pennsylvania Outpatient Antibiotic Use (continued)

By Christine L Mulgrew MPH PhD

As shown in Figure 1, outpatient antibiotic dispensing rates across the United States in 2020 ranged between 348 and 974 per 1,000 people per year (PPY; CDC, 2022) with the national average of 613 PPY. This rate is enough antibiotics for 6 in every 10 Americans to have received an antibiotic prescription during that year. The outpatient antibiotic dispensing rate varied 2.8-fold between the states with the highest and lowest rates. In Pennsylvania, the outpatient antibiotic dispensing rate was 647 PPY, which was 5.5% more than the national average.

The 2020 national outpatient antibiotic dispensing rate decreased 25% compared to the 2019 rate. This remarkable decrease was attributed to fewer outpatient visits that occurred during the COVID-19 pandemic (CDC 2021). A similar trend in outpatient dispensing rates was also observed in Pennsylvania residents (Figure 2) but Pennsylvania saw only a 20% decrease in 2020 compared to 2019 while there was a 27% decrease in 2019 compared to 2015. A similar trend was also observed among Pennsylvania Medicaid recipients between 2015 and 2019, but the rate dropped only 3% between 2019 and 2020. The rate of antibiotic prescribing among Medicaid recipients has been consistently and substantially more than that of the entire Pennsylvania population (which includes residents that have Medicaid).

Figure 1: 2020 Outpatient Antibiotic Dispensing Rate (per 1,000 persons per year) by State

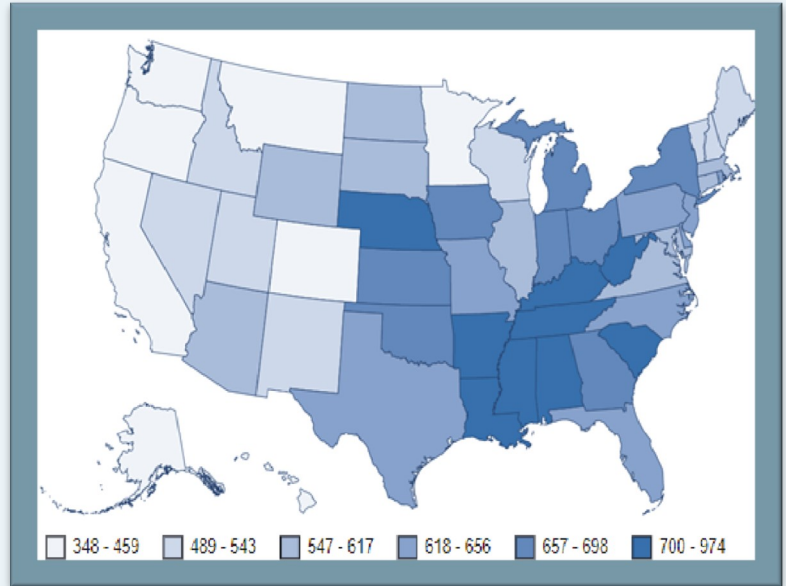
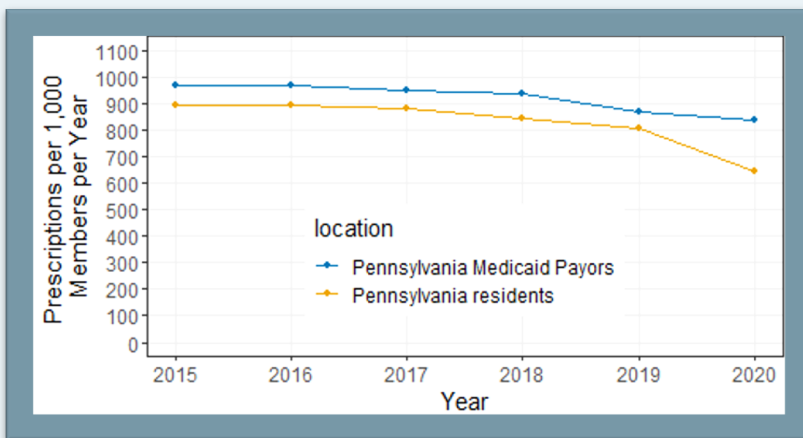


Figure 2: Outpatient Antibiotic Dispensing Rate in Pennsylvania Medicaid Recipients and Pennsylvania Residents



The HAIP/AS program supports outpatient clinics in their endeavors to start and improve antibiotic stewardship programs to reduce antibiotic use among their patients, primarily through efforts to prescribe antibiotics only when needed. Simple efforts offices can take include hanging a [custom-made poster](#) to demonstrate the office's commitment to prescribe antibiotics judiciously and monitoring appropriate antibiotic use through a [CMS MIPS](#) (quality improvement program) antibiotic use measure.

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New Guidelines for Reprocessing Flexible and Semi-rigid Endoscopes (continued)

By: Cara Bicking Kinsey PhD, MPH, RN, CIC

In 2016, the Healthcare Infection Control Practices Advisory Committee (HICPAC) developed [Essential Elements of a Reprocessing Program for Flexible Endoscopes](#) to provide guidance on ways to improve facility-level training and ensure competency for reprocessing endoscopes.

Sample policies and tools are also provided in the [HICPAC toolkit](#) and can be modified to meet the needs of each facility.

In March of 2022, the American National Standards Institute

(ANSI) and the Association for the Advancement of Medical Instrumentation (AAMI) made substantial updates to their guidance document, [ANSI/AAMI ST91:2021, Flexible and semi-rigid endoscope processing in health care facilities](#). Changes address new technologies and lingering concerns about medical device cleanliness and patient safety based on an improved understanding of the science.

The changes to the ANSI/AAMI guidance include:

- Classification for high-risk scopes, such as bronchoscopes and ureteroscopes;
- Updated guidance for drying of scopes, as well as proper storage and handling;
- Recommendations against manual disinfection;
- Guidance for testing water in automated endoscope re-processors to avoid the final-rinse water re-contaminating the scopes;
- Guidance for determining the length of storage, or “hang time,” that a scope can withstand before needing to be reprocessed.

Read more about the changes on the AAMI website here: <https://www.aami.org/news/article/st91-extensive-updates-for-endoscope-cleaning-patient-safety>.



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Quarterly Data Update

Antimicrobial Resistant Organisms Reported in Pennsylvania

Carbapenemase	Quarter 2 - 2022 (4/1/2022 – 6/30/2022)			
	CRE	CRAB	CRPA	Total by Mechanism
KPC	19	0	0	19
NDM	7	0	0	7
IMP	0	0	0	0
OXA-like	0	10	0	10
VIM	0	0	0	0
Carbapenemase detected by phenotype, no genotype detected	0	0	0	0
Total by Organism	26	10	0	36
	Clinical	Colonized	Total	
<i>Candida auris</i>	3	5	8	

Abbreviations: CRE=Carbapenem-resistant *Enterobacterales*; CRAB=Carbapenem-resistant *Acinetobacter baumannii*; CRPA=Carbapenem-resistant *Pseudomonas aeruginosa*. Learn more about carbapenemases and CRE at [CRE Technical Information | CRE | HAI | CDC](#)

*Data include all counties in PA except for Philadelphia. The counts were captured through voluntary reporting by health care facilities and laboratories, including the PA Bureau of Laboratories. To view Philadelphia's surveillance data, please visit their website at <https://hip.phila.gov/data-reports-statistics/healthcare-associated-infections>.

References

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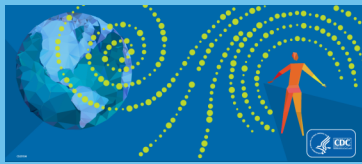
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09/20/2022

FUNGAL DISEASE AWARENESS WEEK SEPTEMBER 19 - 23



“Think Fungus” when symptoms of infection do not get better with treatment.

Check out [this publication](#) by the Philadelphia Department of Public Health describing a fatal case of triazole-resistant *Aspergillus fumigatus*.



OF PENNSYLVANIA

Whether you're an experienced infection preventionist looking for a refresher or someone new to your infection prevention role, take the course to get the latest on best practices. Lessons can be followed at your own pace. **Pennsylvania nurses earn 2.5 CEs upon completion.**

Visit the Learning Management System to access this and other free courses at <https://patientsafetyeducation.org>.

Free Online Course!

The Basics of Infection Prevention in Long-Term Care

Whether you're an experienced infection preventionist looking for a refresher or someone new to your infection prevention role, take the course to get the latest on best practices. Lessons can be followed at your own pace. **Pennsylvania nurses earn 2.5 CEs upon completion.**

Visit the Learning Management System to access this and other free courses at <https://patientsafetyeducation.org>.



We would love to feature your facility or lab as a success story in a future edition of *The Steward*

Please send a brief summary related to preventing antimicrobial resistance or promoting stewardship activities to our resource mailbox: RA-DHHAI@pa.gov

Antibiotic Awareness Week: Nov. 18 – 24



Antibiotics aren't always the answer when you're sick. Ask your doctor how you can feel better.

Make plans now to do one thing during Antibiotic Awareness Week to promote judicious use of antibiotics. These activities work in tandem with numerous others to prevent the development and spread of antibiotic resistant germs and infections.

- Do your best to stay healthy by washing your hands with soap and water or hand sanitizer, using cough etiquette when coughing and sneezing, staying home when sick and getting recommended vaccines like influenza.
- Know and share the [facts](#) about antibiotic use with friends, family and patients.
- Organizations can find templates and printables for a variety of activities in the [CDC partner toolkit](#).

PA Project Firstline aims to provide engaging, innovative, and effective infection and prevention (IPC) control training for frontline PA healthcare workers as well as members of the public health workforce.

Project Firstline's innovative content is designed so that — regardless of a healthcare worker's previous training or educational background — they can understand and confidently apply the infection control principles and protocols necessary to protect themselves, their facility, their family, and their community from infectious disease threats, such as COVID-19. This educational program is created by the PA Department of Health's Healthcare-associated Infection Prevention team in the Bureau of Epidemiology with a goal of reaching all healthcare workers in all roles and facility types to provide foundational knowledge on infection prevention and control (IPC) in a way that is easily accessible, immediately applicable to their work, and *even entertaining*.

How do I get in touch with PA Project Firstline?

- Email us directly through our resource account: RA-DHFIRSTLINE@pa.gov
- Visit our website to access PA Project Firstline materials such as our quarterly newsletter, posters, and CDC Project Firstline educational materials: <http://bit.ly/ProjectFirstlinePA>
- Interested in Project Firstline training at your facility? Complete the [Pennsylvania Project Firstline Training Request Form](#).
- Join the PA Project Firstline Text Message Program: Text **JOIN** to **IPC4U** now.



Frontline Healthcare Worker Survey

PA Project Firstline is distributing an online survey to frontline healthcare workers. The survey will assess healthcare worker literacy in infection prevention and control and identify training gaps. The PA Project Firstline team will develop training to address the identified gaps.

Frontline healthcare workers are encouraged to access the survey to inform PA Project Firstline of their training experiences and needs using the QR code.

