Date: April 5, 2018
To: Clinical Laboratories, Commercial Laboratories and Local Health Departments
From: Wadsworth Center and NYSDOH Bureau of Healthcare-Associated Infections (BHA)

**Laboratory Advisory – Request for Isolates**

*Candida auris*, *Candida glabrata* and other rare *Candida* or yeast species

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Please distribute immediately to:
Hospital Epidemiologists, Infection Preventionists, Laboratory Directors, Infectious Disease Physicians, Medical Directors, and Nursing Directors

*Candida* species are among the most common cause of healthcare-associated bloodstream infections in the United States and antifungal drug resistance in these pathogens is increasing. The recent emergence of multidrug resistant *Candida auris* and its rapid spread in several hospitals and long-term care facilities in New York and other states has raised serious concerns ([https://www.cdc.gov/drugresistance/c-auris.html](https://www.cdc.gov/drugresistance/c-auris.html)).

*Candida glabrata* drug resistant isolates and rare *Candida* species are also emerging in healthcare facilities and are becoming a threat to vulnerable populations. In the fall of 2016, the Center for Disease Control and Prevention (CDC) launched the Antibiotic Resistance Laboratory Network (ARLN) to combat drug resistant microbes including *Candida* species ([https://www.cdc.gov/drugresistance/solutions-initiative/ar-lab-networks.html](https://www.cdc.gov/drugresistance/solutions-initiative/ar-lab-networks.html)).

The Wadsworth Center Mycology Laboratory is working with the CDC-ARLN to enhance lab capacity for the detection of *Candida* antifungal drug-resistance, estimate prevalence in the healthcare facilities, and prevent spread in NY and the northeast (Fact sheet attached).

**WHAT TO SEND**

- All confirmed or suspected *Candida auris* isolates from any specimen source
- All confirmed or suspected *Candida haemulonii* isolates from any specimen source
- All *C. glabrata* isolates from any specimen source
- All rare *Candida* species
- Yeast isolates from any specimen source when your lab is unable to identify species
- **Do not send common *Candida* species (*C. albicans, C. parapsilosis, C. tropicalis, C. krusei, C. dubliniensis*, and *C. lusitaniae*) unless they are found to be resistant to any of the antifungal drugs tested in your laboratory or drug-resistance is suspected clinically**

**GUIDANCE DOCUMENT & CONTACT INFORMATION:**

Detail guidance document starts on page 3.
Please send your inquiries to: mycology@health.ny.gov
Labs that take swift action to submit isolates to their public health lab can help detect *Candida* and stop its spread.

*Candida* is one of the most common causes of healthcare-associated bloodstream infections in the United States and antifungal drug resistance in *Candida* is increasing. There are new and emerging species, like *Candida auris*, which can spread in healthcare settings and cause outbreaks.

With support from CDC’s Antimicrobial Resistance Lab Network, your regional lab can:

- Identify species and detect organisms that are public health threats
- Provide antifungal susceptibility data to track resistance
- Help respond to outbreaks of *Candida*

**What to Send**

- All confirmed or suspected *Candida auris* (*C. auris*) isolates (any specimen source)
- Yeast isolates from any specimen source when unable to identify species after identification was attempted
- *Candida* species other than *C. albicans, C. parapsilosis, C. tropicalis, C. krusei, C. dubliniensis*, and *C. lusitaniae*
- All *C. glabrata* isolates (any specimen source)

**What makes *Candida auris* a public health threat?**

- **It’s difficult to identify.**
  *C. auris* can be misidentified by commonly used yeast identification methods. Among others, it is often misidentified as *C. haemulonii*.

- **It causes severe infections.**
  1 in 3 patients with an invasive *C. auris* infection dies.

- **It’s often drug-resistant.**
  Some *C. auris* infections are resistant to all 3 major antifungal classes of medicines.

- **It’s becoming common.**
  *C. auris* has been reported in more than 20 countries, including the United States.

- **It can spread in healthcare settings.**
  *C. auris* can live on surfaces for weeks and spread between patients, causing outbreaks.

Find the latest CDC *C. auris* guidance: [www.cdc.gov/Fungal/Diseases/Candidiasis/Candida-auris.html](http://www.cdc.gov/Fungal/Diseases/Candidiasis/Candida-auris.html)

**About CDC’s AR Lab Network**
The AR Lab Network can rapidly detect antibiotic resistance in healthcare, food, and the community, and inform local responses to prevent spread and protect people. The AR Lab Network supports lab capacity in 56 state and local labs, including 7 regional labs and the National TB Center. The regional labs provide core testing, including *Candida* testing and CRE colonization testing, for states in their region. Some perform additional screening for *Streptococcus pneumoniae, Neisseria gonorrhoeae*, and *Clostridium difficile.*
Guidance for Antimicrobial Resistance Laboratory Network (ARLN) *Candida* Isolate Submission to the Mycology Laboratory, Wadsworth Center

(Northeast Regional Antimicrobial Resistance Laboratory Network)

**SHIPPING & TESTING ARE AT NO COST!  \  \ SPECIES ID AND AST WITHIN SEVEN DAYS!**

**ISOLATE SUBMISSION**

**A. LABELING REQUIREMENTS**
Isolate must be clearly labeled (electronically generated labels preferred) with:

1. **A minimum of two unique patient identifiers.** Acceptable identifiers include:
   - Patient’s full name
   - Date of birth
   - Medical record number
   - Sample ID number
2. Date of specimen collection

**B. SHIPPING REQUIREMENTS**

- Ship isolates on agar slants that support the growth of yeasts (agar plates are not acceptable)
- Yeast should be stored at 4°C if not shipped immediately
- Ship yeast isolates at ambient temperature
- Complete an Infectious Disease Requisition Form (IDR) either online or a paper copy for each isolate submitted:

**Online - Preferred Method: Electronic Remote Order through Health Commerce System (HCS)**

To access the HCS and the Clinical Laboratory Information Management System (CLIMS), follow the steps below:
• Login to the Health Commerce System (HCS) at:
  https://commerce.health.state.ny.us/public/hcs_login.html

  • Select ‘CLIMS’
  • Select ‘Remote Order’
  • Select ‘Place Order (DOH-4463)’
  • Select the specimen/sample type being submitted (Human, Environmental, etc.)
  • Fill in the required information on tabbed sections (Submitter, Patient, Tests, Additional Info.)
  • On the ‘Test’ tab, enter ‘yeast’; in the search field, and select ‘Search’
  • Matches to the search criteria will populate, select ‘yeast identification from the isolate, and antifungal susceptibility testing for yeast’ from the ‘Test’ Column
  • Select ‘Order Test’ Continue to fill in the required information on tabbed sections, review, and select ‘PLACE THIS ORDER’
  • Continue to fill in the required information on tabbed sections, review, and select ‘PLACE THIS ORDER’
  • Print the form, and include with isolate shipment

**NOTE:**
This method provides many advantages over the paper submission IDR form including specimen tracking, email notification when results become available, online access to results, and access to the test catalog. For licensed clinical laboratories with a valid PFI number or county or regional health department, contact your HIN/HCS coordinator to create your HCS account and gain access to CLIMS. For all others, request access by submitting a signed ‘Request for Access to the Wadsworth Center Laboratory Information Management System (CLIMS) form and fax to (518) 474-8140 or (518) 473-1326.

**2. Paper IDR Submission:**
  • Complete the Infectious Diseases Requisition Form filling in all required information
  • Fill in ‘Candida ID’ in the ‘Other’ section on the form as the test request
  • Include antimicrobial susceptibility testing results
  • Include the IDR form with the isolate shipment
  • Forms may be accessed at:


**C. CONTACT INFORMATION**
For questions: Please email at mycology@health.ny.gov
D. SHIPPING

- Isolates should be shipped overnight Monday through Friday to the following address:

  David Axelrod Institute  
  Mycology Laboratory  
  120 New Scotland Avenue  
  Albany, New York 12208  
  Attn: ARLN

- Ship isolate following International Air Transport Association’s (IATA) “Category B” regulation

NOTE:
- Category B is defined as “an infectious substance not in a form generally capable of causing permanent disability or life-threatening or fatal disease in otherwise healthy humans or animals when exposure to it occurs”.
- A special permit/certification is not required to ship a Category B substance; however, training is necessary to ensure proper packaging of shipments and to reduce risks of exposure during transportation. Training may be informal, consisting of a documented review of Category B shipping practices.

FedEx SHIPPING
Laboratories may ship isolates for ARLN activities free of charge using our Wadsworth Center CDC ARLN account to create a label for shipping by FedEx.

- Log on to Fedex.com
- From the toolbar, select Shipping/Create Shipment
- User ID: ARLNWC
- Password: Resistance2016
- Login to: FedEx Ship Manager at fedex.com Follow instructions in Appendix A to create a shipment
Appendix A- Domestic Shipping on fedex.com

1. Verify the address you are shipping from or change it by clicking the *Edit* link.

2. Enter the recipient’s information or choose an address from your FedEx address book.
3. Choose any of the available options.

4. Priority Overnight is only available option for ARLN account
5. Indicate the package type.

6. Enter the number of packages.
7. If more than one package, indicate whether the packages are identical or not.

8. Enter the total weight.
9. Verify the ship date or change it by clicking on the calendar icon.

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Please note:
- Click the Ship button only once. A transaction fee will be charged if you do not click the Ship button, and it may cause a duplicate shipment transaction to occur.
- By clicking the Ship button, you acknowledge the terms and conditions of the FedEx Service Guide and the Customer Terms and Conditions for FedEx Express International shipments.
- By clicking the Ship button, you agree that the statement does not contain any dangerous goods. If you are uncertain whether your shipment contains dangerous goods, see the help for more information. To ship FedEx Express Dangerous Goods, you must select "Dangerous Goods" in the Special Services section.

10. Verify the account number you would like to bill your transportation cost to.

[Image of a web page showing shipment details]

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11. Click the **Edit** link in Special Services to view and/or choose any special services related to your shipment.

12. Click the **Edit** link in Schedule a Pickup/Drop-off to view your Pickup/Drop-off options.
13. Click the *Edit* link in E-mail Notifications to send shipment, exception or delivery notifications to yourself, the recipient and two others.

14. Click *Calculate* to view rates and transit times related to your shipment.
15. Indicate if you would like to save this shipment for future use as a Shipment Profile (formerly known as FastShip).

16. Or complete this shipment at a later time by clicking the *Save for Later* button.
17. Click the **Ship** button.

18. Print the label(s) displayed below, along with a receipt.
This information is provided to you and its use is subject to the FedEx Automation Agreement under which you obtained or have been authorized to use FedEx Ship Manager @ fedex.com. No warranties are extended and all warranties, including without limitation, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED, regarding this information. Any conflict between this information and the Automation Agreement, or transportation agreement between you and FedEx, or between this information and the FedEx Service Guide will be governed by the Automation Agreement, the transportation agreement and the FedEx Service Guide, in that order. Your use of this information constitutes your agreement to these terms.