



Canadian Nosocomial Infection Surveillance Program Surveillance for *Candida auris*

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BACKGROUND

Candida auris is an emerging multi-drug resistant (MDR) yeast that is associated with transmission in healthcare facilities. It was first isolated in Japan in 2009 and has rapidly emerged in more than two dozen countries on five continents, including Canada and the U.S. *C. auris* has been associated with transmission and large outbreaks in health care settings involving many patients (1, 2), where it can spread from person to person and through contact with contaminated patient environment and equipment (3). Some of the countries reporting patient transmission include the United States, India, Pakistan, the United Kingdom, South Africa, Columbia and Venezuela (4). It can cause both superficial (e.g. wound and ear infections) and invasive infections with a mortality as high as 30 – 60% (5).

C. auris is often resistant to commonly used antifungals. In a study by the US Centers for Disease Control and Prevention, the resistance rates were approximately 90% to fluconazole, 35% to amphotericin B, and 7% to echinocandins. Nearly half of the strains were resistant to >2 antifungal classes (i.e. MDR) and about 4% were resistant to all three classes (5). Furthermore, resistance was also reported to develop during therapy, presumably by selection under antifungal pressure (6). *C. auris* can be difficult to identify in the routine microbiology laboratory. It is often misidentified with standard laboratory methods (Appendix A), which may lead to inappropriate management of the patients (6, 7). MALDI with updated reference databases and rRNA sequencing can reliably identify *C. auris*.

In Canada, twenty-four cases of *C. auris* have been identified from 2012 to 2019 in five provinces from blood, axilla/groin, ear, and other sites. The first case of MDR *C. auris* was reported in May 2017 in a patient with recent hospitalization in India. This patient was also colonized with CPE (8). A Canadian *C. auris* point prevalence study was conducted in 2018 by 21 hospitals amongst high-risk patients. Two isolates were found in the CPO colonized patients, representing a prevalence of 1.9% in the CPO group; however, both patients had recently received healthcare in the Indian subcontinent.

Much remains unknown about the epidemiology and detection of *C. auris*. In Canada, some provinces have established surveillance and CNISP began surveillance in 2019, however there still exists little data to inform whether admission screening should be performed for some high-risk populations. We aim to understand the epidemiology and scope of this emerging fungal pathogen in order to optimize laboratory identification as well as to inform infection prevention and control programs.

OBJECTIVES

1. To identify and describe the epidemiology and risk factors of inpatients and outpatients infected or colonized with *Candida auris* in order to inform screening and infection prevention and control activities;
2. To identify the potential origin and genetic relatedness of Canadian isolates by whole genome sequencing.

METHODS

Site Eligibility

CNISP and non-CNISP CHEC hospitals (with high-risk patient populations) are eligible to participate.

Case Eligibility

Patients admitted to a participating hospital or presenting to a hospital emergency department or a hospital-based outpatient clinic with laboratory confirmation of *C. auris* from any specimen (see APPENDIX 1- *Candida spp.* eligible for inclusion for laboratory criteria.

Numerators

Patient specimens with eligible *C. auris* isolates (as per Appendix 1: APPENDIX 1- CANDIDA SPP. ELIGIBLE for inclusion) will be identified by the hospital microbiology laboratory and sent to the NML with a minimum data set (see Appendix B APPENDIX 2- C. AURIS STANDARDIZED LABORATORY Shipping Form). Only the first *C. auris* identified for each patient during a calendar year will be sent to the NML. If there are multiple isolates within a few days of each other, the isolate from the most invasive specimen should be selected.

Sites will complete a patient questionnaire (see Appendix 3:

APPENDIX 3- PATIENT QUESTIONNAIRE FOR *C. auris* Surveillance) for the first *C. auris* isolate identified. For isolates sent to the NML as suspect *C. auris*, the NML will send confirmatory results via email to the site and the site will complete a patient questionnaire (see Appendix 3:

APPENDIX 3- PATIENT QUESTIONNAIRE FOR *C. auris* Surveillance) if the patient is eligible.

Denominator Data

Denominator data will be collected on the quarterly denominator form and submitted in CNPHI.

The data collected will include:

- 1) total number of patient admissions per year
- 2) total number of inpatient-days per year

In CNPHI, denominator data are entered via the “Profiles and Denominators” page. Since *C. auris* shares denominator data with VRE and MRSA/MSSA, a denominator for *C. auris* will automatically be created when data are entered for VRE or MRSA/MSSA.

Data Management and Reporting

Case Reporting

Please submit all patient questionnaires by email to CNISP at phac.cnisp-pcsin.aspc@canada.ca OR submit under ‘Web Data’. See APPENDIX 5 – WEB DATA FORM SUBMISSION CNPHI for instructions on submitting data in ‘Web Data’.

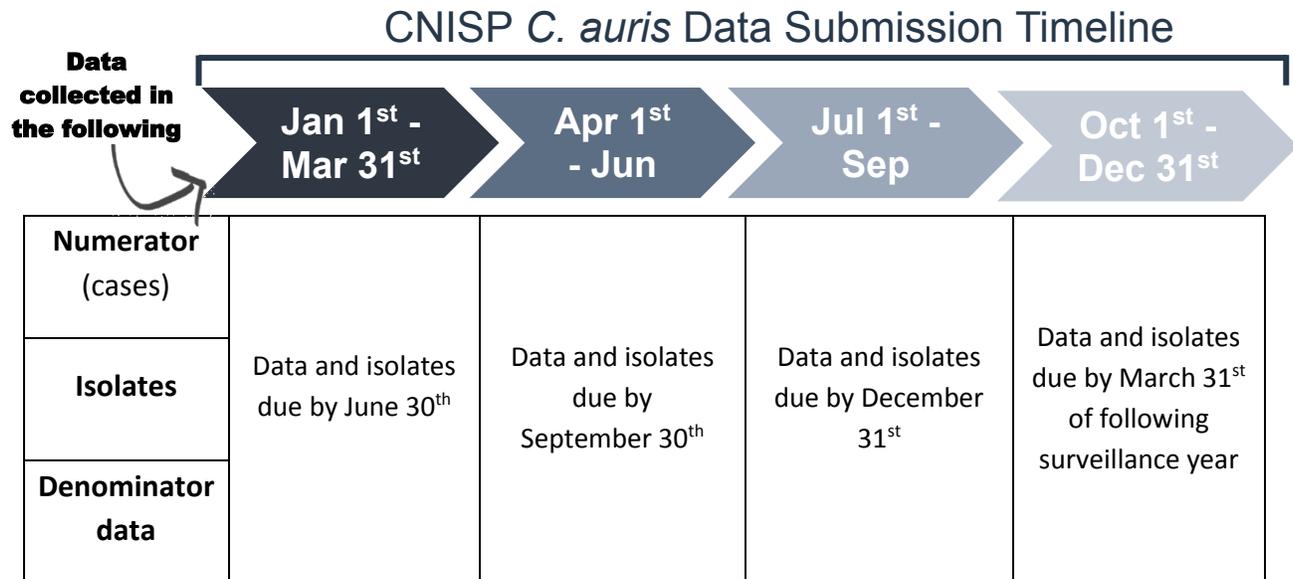
Please assign a unique patient identifier as follows: CHEC site number, surveillance year then consecutive number (e.g. 99ZYY001).

Laboratory Reporting

The LAB SHIPPING FORM must be included with the shipment AND emailed to the NML at phac.nml.ARNIRAIN.Inm.aspc@canada.ca. It is important that when isolates are submitted to the NML that they are identified as CNISP isolates otherwise they will not be included in CNISP surveillance.

Data Submission Timeline

Please submit *C. auris* data and isolates according to the following timeline:



Zero Report

For every surveillance year with no cases at your hospital, a zero report must be made under 'Web Data' in CNPHI by March 31st of the following surveillance year so that years with zero counts can be differentiated from missing data. Instructions for submitting data under 'Web Data' are included in [APPENDIX 5 – WEB DATA FORM SUBMISSION CNPHI](#), or you can email CNISP at phac.cnisp-pcs@nrc.gc.ca to indicate that your hospital does not have any cases to report for that surveillance year.

ANALYSIS

The national and regional number of cases, descriptive epidemiology, microbiology and resistance data will be calculated each year by PHAC and NML staff. Regional and national rates (per 1,000 admissions and per 10,000 inpatient-days) will be calculated if sample size permits. Data will be reported through PHAC surveillance reports, presentations, publications, and published on the Agency and/or AMMI website.

ETHICS

This surveillance project is observational and does not involve any alteration in patient care. Surveillance for healthcare associated infections is a routine component of quality assurance and patient care in Canadian healthcare institutions and therefore informed consent will not be required. All data submitted to the Public Health Agency of Canada are kept strictly confidential. Each questionnaire will be identified by a unique number and no personal identifiers will be transmitted to the Public Health Agency of Canada. This unique number will be linked to the patient's name or hospital number only at the local hospitals and will be kept strictly confidential under secure conditions.

PRIVACY

There is current demand for public disclosure of healthcare associated infections. Any data released by CNISP will be in summary format and will not identify individual hospitals. Hospital administrators should be made aware that national reporting of aggregate data will occur.

Appendix 1- *Candida* spp. eligible for inclusion

Included in this surveillance project are all clinical or screening samples that were positive for *C. auris* by any method. Currently, *C. auris* can be identified by rRNA sequencing, Vitek MS MALDI-TOF (with either the clinical database v3.2 or later or the RUO database), or Bruker MALDI-TOF (with either the clinical database v6903 or later or the RUO database). The project also includes potential *C. auris* misidentifications or “No identification” as outlined in the Table below.

Identification method:	Identification of suspect isolates
Vitek MSMALDI Clinical database older than v3.2	<i>C. haemulonii</i> No ID/low discrimination <i>C. rugosa</i> (not a problem for v3.0 or later) <i>C. pulcherrima</i> (not a problem for v3.0 or later)
Bruker MALDI Clinical database older than v6903	No ID
Vitek 2 version 8.01	<i>C. haemulonii</i> <i>C. duobushaemulonii</i> No ID/ Low discrimination
Vitek 2 version before 8.01	<i>C. haemulonii</i> <i>C. duobushaemulonii</i> <i>C. lusitaniae</i> <i>C. famata</i> No ID/low discrimination
API 20C AUX	<i>Rhodotorula glutinis</i> (characteristic red color not present) <i>C. sake</i> No ID/low discrimination
API Candida	<i>C. famata</i>
BD Phoenix yeast identification system	<i>C. haemulonii</i> <i>C. catenulata</i> No ID

Appendix 2- *C. auris* Standardized Laboratory Shipping Form

Instructions

1. All fields of this form should be filled out and sent to the NML (care of Dr. Bharat) along with the patient specimens. Clearly label each specimen with their unique patient identifier.
2. Please also email this form to phac.nml.ARN1-RAIN.Inm.aspc@canada.ca on the day of shipping to allow tracking of the shipment.
3. Send isolates with this form to the following:

Send to:
Dr. Amrita Bharat
National Microbiology Laboratory
1015 Arlington St., Winnipeg, Manitoba R3E 3R2
Tel: 204-789-7654
Use FedEx billing number: 6327-8173-3

Please click on the icon below to access the excel shipping form:



Appendix B C. auris
lab shipping form 202

Appendix 3

Appendix 3- Patient Questionnaire for *C. auris* Surveillance

Please complete for all *C. auris* cases. Please see Data dictionary in [APPENDIX 4- Data Dictionary](#) for definitions and notes.

1.	CHEC Site: _____	
2.	Unique Patient ID: _____ YY _____ (e.g. 99Z20001) (CHEC site #) (year) (case number)	
3.	Date of birth: ____ / ____ / ____ DD MMM YYYY	Age _____ <input type="checkbox"/> Years <input type="checkbox"/> Months <input type="checkbox"/> Days
4.	Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Unknown	
5.	Date of first positive culture: ____ / ____ / ____ DD MMM YYYY	
6a.	First positive isolate: <input type="checkbox"/> Clinical isolate <input type="checkbox"/> Screening isolate	
6b.	If CLINICAL ISOLATE , site of isolation (<i>check multiple sites if positive cultures were obtained on the same day</i>): <input type="checkbox"/> Not applicable <input type="checkbox"/> Blood <input type="checkbox"/> Sputum <input type="checkbox"/> Skin/soft tissue <input type="checkbox"/> Urine <input type="checkbox"/> Ear swab <input type="checkbox"/> Cerebrospinal fluid (CSF) <input type="checkbox"/> Bronchoalveolar lavage (BAL) <input type="checkbox"/> Stool <input type="checkbox"/> Other, specify: _____ <input type="checkbox"/> Unknown	
6c.	If SCREENING ISOLATE , site of isolation (<i>check multiple sites if positive cultures were obtained on the same day</i>): <input type="checkbox"/> Not applicable <input type="checkbox"/> Nares <input type="checkbox"/> Groin <input type="checkbox"/> Axilla	

	<input type="checkbox"/> Rectum <input type="checkbox"/> Other, specify: _____ <input type="checkbox"/> Unknown		
6d.	<p>If SCREENING ISOLATE, what was the purpose of the screening?</p> <input type="checkbox"/> Not applicable <input type="checkbox"/> Contact of a newly identified case <input type="checkbox"/> Primary screening of an at-risk patient <input type="checkbox"/> Other, specify: _____		
7.	<p>Is this isolate associated with an infection or colonization?</p> <input type="checkbox"/> Infection ¹ <input type="checkbox"/> Colonization		
8.	<p>Other sites of clinical and screening isolates, AFTER the first isolate (<i>please check all that apply</i>):</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> None identified <input type="checkbox"/> Blood <input type="checkbox"/> Sputum <input type="checkbox"/> Skin/soft tissue <input type="checkbox"/> Urine <input type="checkbox"/> Ear swab <input type="checkbox"/> Rectum <input type="checkbox"/> Unknown <input type="checkbox"/> Other, specify: _____ </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Groin <input type="checkbox"/> CSF <input type="checkbox"/> BAL <input type="checkbox"/> Surgical site <input type="checkbox"/> Stool <input type="checkbox"/> Nares <input type="checkbox"/> Axilla </td> </tr> </table>	<input type="checkbox"/> None identified <input type="checkbox"/> Blood <input type="checkbox"/> Sputum <input type="checkbox"/> Skin/soft tissue <input type="checkbox"/> Urine <input type="checkbox"/> Ear swab <input type="checkbox"/> Rectum <input type="checkbox"/> Unknown <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Groin <input type="checkbox"/> CSF <input type="checkbox"/> BAL <input type="checkbox"/> Surgical site <input type="checkbox"/> Stool <input type="checkbox"/> Nares <input type="checkbox"/> Axilla
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9.	<p>Location of the patient in hospital on day of first positive culture?</p> <input type="checkbox"/> Inpatient <ul style="list-style-type: none"> <input type="checkbox"/> ICU <input type="checkbox"/> Medical ward <input type="checkbox"/> Surgical ward <input type="checkbox"/> Hematology-Oncology/Bone Marrow Transplant <input type="checkbox"/> Other, specify: _____ <input type="checkbox"/> ER <input type="checkbox"/> Outpatient <input type="checkbox"/> Other, specify: _____ <input type="checkbox"/> Unknown		
10.	<p>Date of admission when current positive culture?</p> <p style="text-align: center;">____ / ____ / ____</p>		

¹ Infection is determined using the 2020 CDC/NHSN surveillance definitions for specific infections, and in accordance with the best judgment of the healthcare practitioner. These criteria can be accessed at [URL:www.cdc.gov/nhsn/PDFs/pscManual/17pscNosInfDef_current.pdf](http://www.cdc.gov/nhsn/PDFs/pscManual/17pscNosInfDef_current.pdf)

	<p style="text-align: center;">DD MMM YYYY</p> <p><input type="checkbox"/> Not applicable (patient not admitted)</p>
11.	<p>Is there any evidence of transmission from or to another patient within your facility?</p> <p><input type="checkbox"/> Yes, if possible specify unique patient ID of the related case: _____</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Unable to determine</p>
12a.	<p>Does the patient have a history of travel outside of Canada in the past 12 months?</p> <p><input type="checkbox"/> Yes, if possible specify the country: _____</p> <p><input type="checkbox"/> No (skip to Q13)</p> <p><input type="checkbox"/> Unable to determine (skip to Q13)</p>
12b.	<p>If traveled outside of Canada in the past 12 months, does the patient have a history of hospitalization or receipt of healthcare outside of Canada?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Unable to determine</p>
13.	<p>Is the patient CPE colonized or infected?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No, has been screened and tested negative</p> <p><input type="checkbox"/> Unknown, not screened for colonization</p>
14.	<p>Was the patient admitted to an ICU within 30 days of first positive culture?</p> <p><input type="checkbox"/> Patient was already in an ICU at the time of the positive culture was obtained</p> <p><input type="checkbox"/> Yes, please indicate the date of ICU admission: ____ / ____ / ____</p> <p style="text-align: center;">DD MMM YYYY</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Unknown</p>
15.	<p>What was the patient outcome 30 days after first positive culture?</p> <p><input type="checkbox"/> Patient alive, still in hospital</p> <p><input type="checkbox"/> Patient survived and discharged</p> <p>Date of discharge ____ / ____ / ____</p> <p style="text-align: center;">DD MMM YYYY</p>

	<input type="checkbox"/> Patient survived and transferred Date of transfer ____ / ____ / ____ DD MMM YYYY <input type="checkbox"/> Patient died Date of death ____ / ____ / ____ DD MMM YYYY <input type="checkbox"/> Unknown																														
16a.	Was an antifungal susceptibility performed on an isolate from this patient? <input type="checkbox"/> Yes <input type="checkbox"/> No (end of questionnaire)																														
16b	If yes, specimen type: _____ Date collected: ____ / ____ / ____ DD MMM YYYY <table border="1" data-bbox="305 945 1526 1617"> <thead> <tr> <th data-bbox="305 945 771 1050">Antifungal</th> <th data-bbox="771 945 1031 1050">Not tested</th> <th data-bbox="1031 945 1526 1050">Reported result (e.g. disc diameter or MIC)</th> </tr> </thead> <tbody> <tr> <td data-bbox="305 1050 771 1108">Fluconazole</td> <td data-bbox="771 1050 1031 1108" style="text-align: center;"><input type="checkbox"/></td> <td data-bbox="1031 1050 1526 1108"></td> </tr> <tr> <td data-bbox="305 1108 771 1167">Itraconazole</td> <td data-bbox="771 1108 1031 1167" style="text-align: center;"><input type="checkbox"/></td> <td data-bbox="1031 1108 1526 1167"></td> </tr> <tr> <td data-bbox="305 1167 771 1226">Posaconazole</td> <td data-bbox="771 1167 1031 1226" style="text-align: center;"><input type="checkbox"/></td> <td data-bbox="1031 1167 1526 1226"></td> </tr> <tr> <td data-bbox="305 1226 771 1285">Voriconazole</td> <td data-bbox="771 1226 1031 1285" style="text-align: center;"><input type="checkbox"/></td> <td data-bbox="1031 1226 1526 1285"></td> </tr> <tr> <td data-bbox="305 1285 771 1344">Amphotericin B</td> <td data-bbox="771 1285 1031 1344" style="text-align: center;"><input type="checkbox"/></td> <td data-bbox="1031 1285 1526 1344"></td> </tr> <tr> <td data-bbox="305 1344 771 1402">Caspofungin</td> <td data-bbox="771 1344 1031 1402" style="text-align: center;"><input type="checkbox"/></td> <td data-bbox="1031 1344 1526 1402"></td> </tr> <tr> <td data-bbox="305 1402 771 1461">Micafungin</td> <td data-bbox="771 1402 1031 1461" style="text-align: center;"><input type="checkbox"/></td> <td data-bbox="1031 1402 1526 1461"></td> </tr> <tr> <td data-bbox="305 1461 771 1520">Anidulafungin</td> <td data-bbox="771 1461 1031 1520" style="text-align: center;"><input type="checkbox"/></td> <td data-bbox="1031 1461 1526 1520"></td> </tr> <tr> <td data-bbox="305 1520 771 1617">Flucytosine</td> <td data-bbox="771 1520 1031 1617" style="text-align: center;"><input type="checkbox"/></td> <td data-bbox="1031 1520 1526 1617"></td> </tr> </tbody> </table>	Antifungal	Not tested	Reported result (e.g. disc diameter or MIC)	Fluconazole	<input type="checkbox"/>		Itraconazole	<input type="checkbox"/>		Posaconazole	<input type="checkbox"/>		Voriconazole	<input type="checkbox"/>		Amphotericin B	<input type="checkbox"/>		Caspofungin	<input type="checkbox"/>		Micafungin	<input type="checkbox"/>		Anidulafungin	<input type="checkbox"/>		Flucytosine	<input type="checkbox"/>	
Antifungal	Not tested	Reported result (e.g. disc diameter or MIC)																													
Fluconazole	<input type="checkbox"/>																														
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Micafungin	<input type="checkbox"/>																														
Anidulafungin	<input type="checkbox"/>																														
Flucytosine	<input type="checkbox"/>																														
17.	During this admission or in the 14 days prior to this admission, did this patient test COVID-19 positive for the first time? <input type="checkbox"/> Yes - if your site participates in VRI surveillance, please provide the PID for the COVID-19 patient questionnaire: _____ <input type="checkbox"/> No <input type="checkbox"/> Unknown																														

Appendix 4- Data Dictionary

Definitions and notes for Patient Questionnaire ([REFER TO APPENDIX 3- PATIENT QUESTIONNAIRE FOR C. auris Surveillance](#))

1. CHEC Site

This will be the three character alphanumeric number assigned to your institution. It will always begin with the two digit number assigned to your CHEC member (e.g., 08, 33) and a letter assigned by the CHEC member for that specific institution e.g., A, B, C, etc.

2. Unique patient ID

The unique patient ID should consist of the three character CHEC site # (e.g., 99Z), the surveillance year the infection was identified (e.g., 19), and a consecutive number starting at 001 and continuing with each additional case. An example of the first case in an institution would be 99ZYY001. An example of the thirty-first case would be 99ZYY031, and so on.

Note: Always label the laboratory isolate with this unique ID number.

3. Date of birth or age

Please enter Day (##), Month (May) and Year (1985) in this order. If the date of birth is not available, please enter the patient's age (in years, months or days) at the time of positive culture.

4. Sex

Check male, female or unknown

5. Date of first positive culture

Please indicate when the isolate that tested positive was collected.

6. Isolates

a. Type of first positive isolate

Please indicate whether the isolate was obtained as a result of a clinical specimen (e.g., blood, CSF, ear swab, etc.) or a screening isolate (e.g., admission swab, point prevalence swab, etc.)

b. Site of isolation for clinical isolates

Please indicate the type of specimen from which this *C. auris* was isolated (e.g., sputum, urine, skin/soft tissue, etc.)

c. Site(s) of isolation for screening isolates

Please indicate the type of specimen in which this *C. auris* was detected (e.g., nares, groin, axilla, etc.)

d. What was the purpose for collecting the screening isolate?

Please indicate which of the following was the reason the screening isolate was collected: the screened patient was a contact (e.g., a roommate) of a newly identified case, or was considered at high risk (e.g., history of receipt of healthcare in the Indian subcontinent) for *C. auris* colonization, or please specify another reason.

7. Is this isolate associated with an infection or colonization?

Based on the isolate submitted, please indicate if this case is colonized or infected. Infection is determined using the CDC/NHSN surveillance definitions for specific interventions AND in accordance with the best judgement of the infection control and/or healthcare practitioner. These criteria can be accessed at:

http://www.cdc.gov/nhsn/PDFs/pscManual/17pscNosInfDef_current.pdf

8. Other site(s) of clinical and screening isolates, AFTER the first isolate (*check all that apply*)

After the first eligible isolate was identified, please indicate all the specimen(s) in which *C. auris* was detected in a subsequent clinical or screening isolate.

9. Location of patient in hospital on day of first positive culture?

Please indicate the location of the patient at the time the specimen that yielded *C. auris* was obtained. If the patient was an inpatient, please indicate the ward the patient was on (e.g., medical, surgical, ICU). Otherwise, please indicate whether the patient was in the emergency department or was an outpatient.

10. Date of admission when current positive culture?

Please indicate the date when the patient was admitted to the hospital using this format Day (##), Month (Oct) and Year (####). For outpatients and ER patients, who were not admitted, please select 'not applicable'.

11. Is there any evidence of transmission from or to another patient within your facility

Please indicate if the patient could be epidemiologically related to another *C. auris* colonized/infected patient, because either the patient was a secondary case because of a significant contact (e.g., roommate) with an identified case, or the patient was the index case with transmission to another case /other cases. If yes, please specify the unique patient ID of the related case if available (see unique patient ID section above).

12. Patient travel history

a. Does the patient have a history of travel outside Canada in the past 12 months?

Please indicate if the patient has travelled outside of Canada in the 12 months prior to the date of positive culture. If yes, please specify to which country. If no or unable to determine, please skip to Q13

b. If travelled outside of Canada in the past 12 months, does the patient have a history of hospitalization or receipt of healthcare outside of Canada?

If the answer to question 12a is 'Yes', please indicate to the best of your knowledge whether the patient received medical care while travelling outside Canada.

13. Is the patient CPE colonized/infected?

Please indicate if, to your knowledge, the patient has ever had CPE (carbapenemase producing Enterobacteriaceae) isolated from a clinical or screening specimen. If they have not, please record whether they were screened for CPE during this hospital admission/out-patient visit. If neither is true, select "unknown".

14. Was the patient admitted to an ICU within 30 days of first positive culture?

Please indicate whether the patient was admitted to the ICU within 30 days of first positive culture.

15. Patient outcome 30 days after CPO first positive culture?

Thirty days after the date of first positive culture please select one of the outcome options available.

16. Antifungals

a. Was antifungal susceptibility performed on an isolate from this patient?

Please indicate if any antifungal susceptibility testing was performed in your lab or a reference lab for any one of this patient's isolates.

b. Antifungal(s) tested

If the answer to question 16a is 'Yes', please specify the type of specimen (e.g., blood, CSF, sputum, etc.) that was tested and the date collected using this format Day (##), Month (July) and Year (####). Then please report susceptibilities as they are reported in the patient's medical record or the laboratory system. Check the box on the second column of the table if the named antifungal(s) was **NOT** tested. If tested please report the susceptibility result, with units (e.g. mm diameter, mg/L) in the third column.

Appendix 5 – Web Data Form Submission CNPHI

Government of Canada / Gouvernement du Canada | Canada.ca

Canadian Network for Public Health Intelligence

Home Knowledge Surveillance Collaboration Support Centre

Canadian Nosocomial Infection Surveillance Program

Joelle Cayen

Under Collaboration select Canadian Nosocomial Infection Surveillance Program

Documents Manager

- Tree view options
- Legend
- Search
- Refresh Folders

Root

Internal resource link: <https://www.cnphi-rcrsp.ca/cir/folder/16264>
[Add to your CNPHI clipboard](#)

Folders: 77
Binders: 75

Folder Notification

Select Web Data
(Patient questionnaires and denominator forms are kept here)

Web Data

Create New Form/Survey

Forms

[Go to Surveys](#)

C. auris Patient Questionnaire

View Records 3 Form Manager

Additional Functions

Add new record Download records

Query Builder

C. auris Zero Report

View Records 0 Form Manager

Additional Functions

CSF Shunt Denominator Form

View Records 7 Form Manager

Additional Functions

Scroll to find the patient questionnaire or denominator form you're looking for

Additional Functions
Add new record

Revision History

Date	Revisions Made
October 2019	<ol style="list-style-type: none">1. Update of background2. Added Q8 classification status (infection or colonization)3. Added the following response option to Q9 'Hematology-Oncology/Bone Marrow Transplant'4. Added Q14 ICU admission and Q15 30 day outcome5. Update of Appendix 1 (table with potential misidentifications of <i>C. auris</i> on different ID systems) based on the latest information in the CDC table https://www.cdc.gov/fungal/candida-auris/recommendations.html
January 2021	A new question added: During this admission or in the 14 days prior to this admission, did this patient test COVID-19 positive for the first time?

References

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