Management and Control of Candida auris in NSW Health Facilities

Summary This Guideline has been developed to support NSW health facilities to detect, manage and control Candida auris including surveillance and infection prevention and control.

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Distributed to Public Health System, Divisions of General Practice, Government Medical Officers, NSW Ambulance Service, Environmental Health Officers of Local Councils, Private Hospitals and Day Procedure Centres, Health Associations Unions, Tertiary Education Institutes

Audience Clinical and Nursing

NSW Health

Guideline

Management and Control of *Candida auris* in NSW Health Facilities

Guideline Summary

This Guideline has been developed to support NSW health organisations to manage and control *Candida auris* (*C auris*) including surveillance and infection prevention and control and is applicable to all health facilities in NSW. Patients who had treatment at an overseas health facility are at high risk of *C auris* colonisation. It is important that these patients and their close contacts are consistently identified and *C auris* screening attended.

C auris is a notifiable pathogen and the laboratories are required to notify their local Public Health Unit within 24 hours of validating a result.

This Guideline is designed to:

- Identify suspected cases of *C auris*.
- Implement control measures to prevent transmission of *C auris*.
- Understand the local epidemiology of *C auris.*

While this Guideline has been written specifically for NSW health organisations, recommended measures may also be applicable to all other health facilities in NSW. Implementation of measures should be based on local decision in consultation with content experts.

Key Principles

Prevention or reduction of *C auris* acquisition and subsequent infection requires a combination of targeted surveillance, response, and management within the health organisations. To achieve this the following principles are to be followed:

- Conduct a risk assessment to identify people at risk of *C auris* acquisition.
- Screening, detection, and investigation of cases.
- Manage cases with appropriate infection prevention and control measures.
- Manage outbreaks and local transmission.

This Guideline provides a tool to assist NSW health organisations and other health facilities with developing local systems and processes to identify and manage *C auris* cases effectively to ensure minimal impact on service provision.

Any suspected or confirmed *C auris* isolate from clinical and/or, screening samples are notifiable to NSW Health.

Revision History

Version	Approved By	Amendment Notes
GL2025_006 May-2025	Deputy Secretary, Population and Public Health & Chief Health Officer	New guideline.

Contents

1. Background

Candida auris (C. auris) is an emerging, clinically important yeast that can cause invasive infection and is associated with significant mortality [1, 2]. Unlike most other fungi/yeasts, *C auris* has been associated with outbreaks in both acute and non-acute settings, particularly in patients with co-morbidities, or being mechanically ventilated on high acuity wards such as intensive care units and in long term care facilities [2] [3] [4] [5].

C. auris is included as a Critical Antimicrobial Resistance Alert organism by the Australian Commission on Safety and Quality in Health Care due to increasing reports of resistance to commonly used antifungal medications and tendency to cause healthcare associated infections including outbreaks [6] [7] [8].

Annually, a small number of cases are detected in Australia, with the majority related to care in overseas health facilities or contact with a colonised person. However, local acquisition has occurred, and health care associated infection remains an ongoing risk.

Route of transmission

C. auris is usually spread via contact and readily colonises skin [9] [10]. It is spread from patient to patient by direct contact and contact with shared, contaminated equipment and/or the environment [11] [12-14] [15]. It is not spread through coughing or sneezing, and air dispersal remains rare.

C. auris has been cultured from patient equipment such as temperature probes, blood pressure cuffs and tympanic thermometers, and contamination of the patient's environment is well described [11] [12] [14]. Because *C. auris* can persist on surfaces for several weeks and many commonly used hospital grade disinfectants may not be effective against it, *C. auris* can readily spread between patients and cause outbreaks in healthcare settings.

A single transmission event should trigger an investigation into potential contacts. On average 45 contacts require screening for each index case [16].

Public Health significance[16]

There are 4 aspects of *C. auris* that make it an organism of concern:

- *C. auris* is readily transmitted from person to person via the healthcare environment. It is therefore associated with healthcare associated outbreaks.
- *C. auris* is difficult to identify on agar plates that have mixed bacterial and fungal flora. *C. auris* needs to be specifically requested on the pathology order form, as specific agar and processes need to be performed by the microbiology laboratory to detect and identify *C. auris*. Molecular methods such as matrix-assisted laser desorption ionization time-of-flight mass spectrometry (MALDI-TOF) or specific agar plates are required for identification.
- *C. auris* is often resistant to commonly used antifungal agents and may be multidrug resistant [6] [7] [8].
- *C. auris* persists in the environment. It survives on non-porous surfaces for at least 2 weeks [13] and has been cultured from bed surfaces and dry linen after 7 days [11].

1.1. About this document

This Guideline provides guidance on the type of patients who should be screened for *C. auris* and the recommended responses to detections including infection prevention and control in NSW Health care facilities.

Any suspected or confirmed *C. auris* specimen from clinical and/or screening samples is in scope. All patient *C. auris* positive test results are notifiable to the Communicable Diseases Branch by the laboratory provider.

This Guideline should be read in conjunction with the following documents:

- NSW Health Policy Directive *Infection Prevention and Control in Healthcare Settings* (PD2023_025)
- Clinical Excellence Commission *Infection Prevention and Control Practice Handbook*
- NSW Health Policy Directive *Cleaning of the Healthcare Environment* (PD2023_018).

Note: NSW Health or the Clinical Excellence Commission (CEC) endorse or promote any specific products or equipment identified in this Guideline.

1.2. Key definitions

Case	Suspected case The detection of non-albicans Candida species which could be *C. auris* particularly in high-risk patients. Confirmed case The detection or isolation of *C. auris* by molecular methods from a diagnostic or screening specimen irrespective of phenotypic susceptibility. A confirmed case may be colonised and/or infected with *C. auris*.
Clearance	In this Guideline, clearance refers to the criteria applied to determine whether a patient no longer requires transmission-based precautions in relation to risk of transmission of *C. auris.*
Contact	Room contact A room contact is a person who resided for at least 24 hours in a room in a health organisation or residential care facility with someone confirmed to have *C. auris* colonisation and/or infection. Ward contact A ward contact is any person who has been on a ward or department for at least 24 hours where there has been at least one confirmed *C. auris* case. There must be a plausible epidemiological connection between the cases, either through geographic proximity or shared staff, equipment, or other

	exposures in the facility.
Functional risk area (FRA)	A functional risk area (FRA) is an area (a distinct geographical area or ward) in which local transmission has been determined to have occurred. A functional risk area is considered no longer outbreak-active when at least 4 weeks have passed with no additional cases identified via surveillance screening.
Incident Management Team (IMT)	In this Guideline, an Incident Management Team (IMT) is a group of experts from NSW Health convened by the Health Protection NSW for a system level response with the purpose of reviewing, risk assessing and making recommendations for risk management.
Local transmission/ outbreak	Local transmission is defined as: • Two or more confirmed cases of *C. auris* proven to be genetically linked by whole genome sequencing, OR • Two or more cases with a plausible epidemiological link and without an alternative explanation.
NSW Health Organisation	This term refers to local health districts, statutory health corporations, affiliated health organisations and administrative units within the Health Administration Corporation, such as the NSW Ambulance Service, HealthShare NSW and the Ministry of Health, as defined in the *Health Services Act 1997* (NSW).
Outbreak Management Team (OMT)	In this Guideline, an Outbreak Management Team (OMT) is a multi-disciplinary group usually from the affected facility/ies who work together to investigate and manage an outbreak. The core team is responsible for planning and coordinating any investigation.
Period of transmission risk	The period of transmission risk is the time period when a patient with *C. auris* could potentially transmit *C. auris* to another patient. This is usually from the date of likely acquisition until the time when they are placed in contact precautions or discharged/transferred. This is used for determining room contacts who require screening.
Trigger point	A “trigger” is a point at which the incidence of a particular infectious organism is higher than what would be normally expected. A trigger is not necessarily an outbreak however, some triggers may be outbreaks, but some will be natural variation in the incidence of an organism.

Whole genome sequencing (WGS)	Whole genome sequencing (WSG) is a laboratory procedure that determines the order of bases in the genome of an organism in one process that can provide unique genetic finger printing.

1.3. Legal and legislative framework

C. auris is a NSW notifiable condition under the *Public Health Act 2010* (NSW). Laboratories are required to notify their local Public Health Unit by telephone within 24 hours of validating a result (see NSW Health webpage Disease notification).

If a patient under 18 years old is screened or managed for C. auris under these guidelines, care must be provided in accordance with the Child Safe Standards, as required by the *Children's Guardian Act 2019* (NSW). This includes for example, considering the safety of the physical environment, supervision requirements and minimising the opportunity for harm to occur, if a child or young person needs to be isolated.

2. Role and responsibilities

The prevention and management of *C. auris* requires prompt and coordinated action from several NSW Health Organisations and specialities. This section describes the key stakeholders and their roles and responsibilities.

2.1. Health Protection NSW

Health Protection NSW (HPNSW) provides statewide surveillance for *C. auris* notifications. The NSW Health facility is primarily responsible for *C. auris* cases within their health care facility. Outbreaks may involve HPNSW and the Clinical Excellence Commission (CEC) and the local public health unit.

2.2. Clinical Excellence Commission

The CEC provides infection prevention and control expertise, guidance, and support for NSW Health Organisations in the prevention and management of *C. auris*. In the event of local transmission, they will be part of the Incident Management Team (IMT) in consultation with local infection prevention and control professionals and coordinate responses in NSW Health facilities in partnership with HPNSW.

The CEC also provides support to the facility in investigation and management, including on-site visits if required.

2.3. Public Health Units

Public Health Units (PHUs) provide support to a Health Organisation in investigating and reporting detection of *C. auris* and may assist in contact tracing for patients who have been transferred or discharged to another health organisation or facility.

2.4. Local health districts and specialty health networks

Local health districts and specialty health networks are to have a plan for the identification, response, and management of *C. auris* (refer to Appendix 6 *Implementation checklist*). A local plan within each facility is expected to include the following:

- governance and communication
- identification and screening of high-risk patients
- infection prevention and control strategies including environmental cleaning and disinfection.

In the event of local transmission (or outbreak) an outbreak management team (OMT) must be convened if there are 2 or more patients who are identified with *C. auris* who are potentially epidemiologically or genomically linked. For example, 2 patients in the same room or ward with at least one of them having no other risk for *C. auris.*

The facility OMT:

- Reviews all relevant patient information.
- Investigates possible transmission routes.
- Develops a line list (a table in which important information on each affected patient is recorded) in consultation with the PHU if necessary.
- Implements and oversees mitigation measures.
- Manages screening of relevant contacts

If a contact has been transferred to another facility, the transferring facility is to notify the receiving facility about the known *C. auris* contact. The transferring facility is to also communicate the need for screening and/or an alert to be placed in the patient's medical record.

For patients who have been discharged, an alert is to be placed in the medical record and relevant information provided to their general practitioner (GP). This is covered in more detail in Section 3.1.1 *Room contact*.

2.4.1. Whole genome sequencing

Whole genome sequencing (WGS) may be considered when there is more than one case. Consultation with local or LHD/SHN Infectious Disease Service and the Medical Microbiologist with local infection prevention and control input for advice on the use of WGS and any environmental screening if there is more than one case.

In the event of ongoing transmission and an epidemiological link, WGS is usually not required. Consultation with the Infectious Diseases Service and the Medical Microbiologist with infection prevention and control input of the facility is recommended. Additional guidance can be sought from the CEC.

2.5. NSW Health Pathology / pathology providers

The role of pathology providers is to identify suspected or confirmed *C. auris*, and notify the initial diagnosis to their local Public Health Unit by telephone within 24 hours of the diagnosis (see NSW Health webpage Disease notification). This is a requirement under the *Public Health Act 2010* (NSW).

Some laboratories will not have the required technologies to enable identification of *C. auris.* These laboratories are to have a process for referring potential *C. auris* isolates to a laboratory which can provide confirmation of *C. auris*. Local health districts and specialty health networks must have referral processes and communication pathways for specimen transfer to the appropriate laboratory.

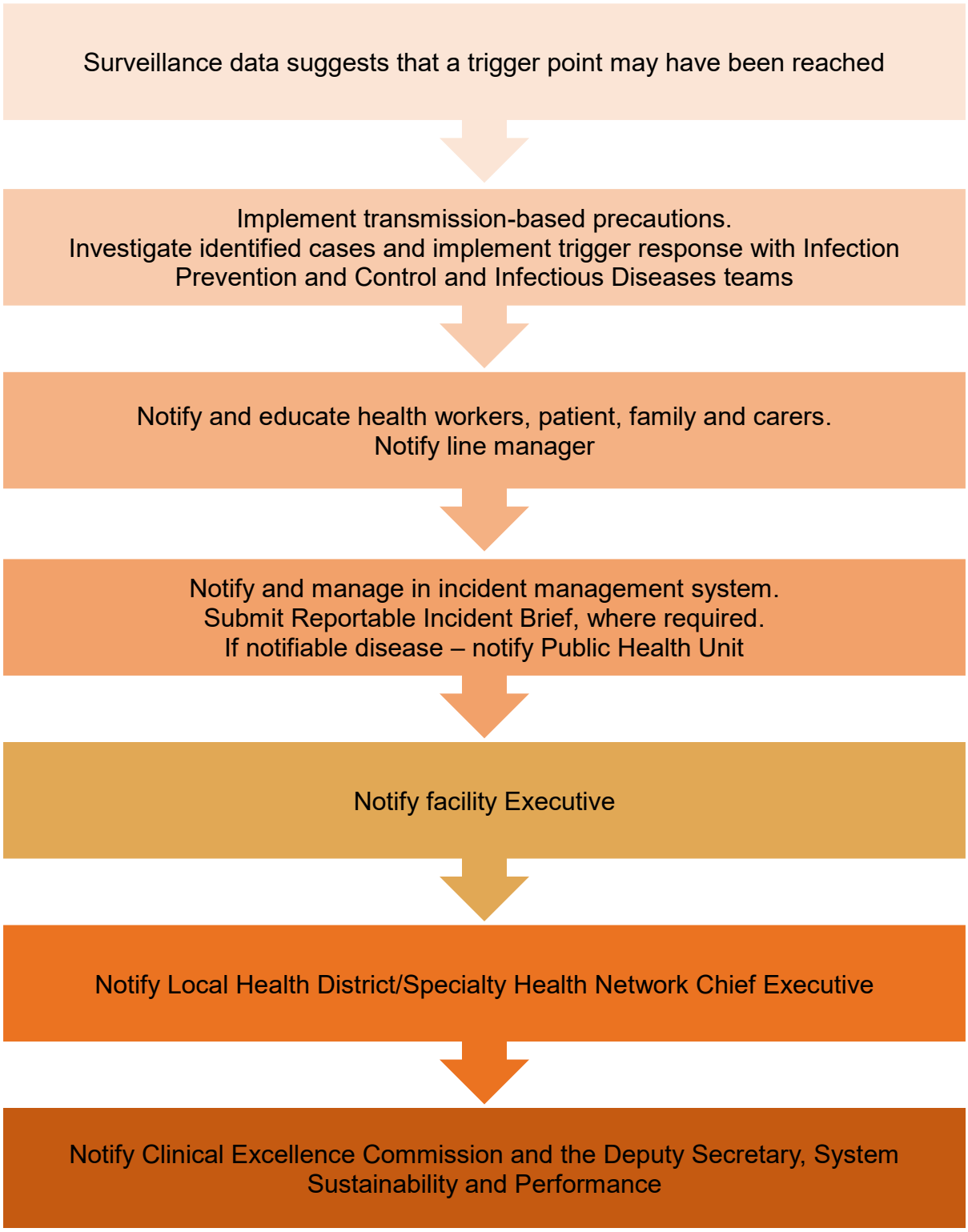
Consultation with the medical microbiologist covering the health care facility is recommended to confirm the required pathology request format or electronic order process. WGS may be required if 2 or more epidemiologically linked cases are identified. Consultation with the Infectious Diseases Service and the Medical Microbiologist with local infection prevention and control input. Additional guidance can be sought from the CEC.

All identified *C. auris* isolates should be kept for a minimum of 4 weeks. However, if the laboratory can freeze and store, with a catalogue system, then they should be kept for 6 to 12 months.

2.6. Escalation pathway

NSW Health organisations are to develop an appropriate and consistent internal and external communications pathway to enable timely escalation of information to the appropriate level (refer to Figure 1 *Triggers and escalation pathway*). These procedures should include a documented process with triggers, response required for escalation, responsibility, and timeframes aligned with the NSW Health Policy Directive *Incident Management* (PD2020_047). For more information also refer to the NSW Health Guideline *Triggers for Escalation Following Detection of Infection Outbreaks or Clusters* (GL2024_013).

Figure 1. Triggers and escalation pathway



3. Screening, detection, and investigation

To prevent *C. auris* spread, it's important to combine targeted screening for colonisation and infection control strategies for suspected and confirmed cases.

NSW Health organisations need to have processes in place for identifying and screening patients at risk of *C. auris* colonisation. This includes identifying patients at admission and if there is local transmission, room and/or ward contacts of a known case. A suggested process is provided in Figure 2 *Patient identification risk assessment*.

This section includes information on who to screen, how to screen and clearance criteria for patients who have been screened.

As the most common entry of *C. auris* at the time of this Guideline is overseas acquisition, detection of patients at higher risk of *C. auris* colonisation at the point of admission is required[1]. Admission processes must include questions that help identify patients who require *C. auris* screening, whether admission occurs via an emergency presentation or is planned.

3.1. Who to screen

Patients at higher risk of being colonised or infected with *C. auris* are the following and need to be screened*:*

- Are a direct referral from an overseas hospital.
- Are a room contact of a patient or resident who is infected or colonised with *C. auris*.
- Have received care in an overseas healthcare facility in the preceding 12 months.

Any patient meeting these definitions need to be screened for *C. auris* and they should be pre-emptively isolated and managed with contact precautions until at least preliminary results are available (48 to 72 hours) [refer to Figure 2 *Patient identification risk assessment*].

3.1.1. Room contact

A room contact may still be an inpatient or could have been discharged.

1. Room contacts who are still inpatients:
    a. Pre-emptively isolate and screen for *C. auris* (may be cohorted with other room contacts while screening is underway) until at least preliminary results are available (48 to 72 hours).
    b. Implement contact precautions until clearance criteria have been met.
2. Room contacts who have been discharged/transferred and who have not met clearance criteria prior to discharge/transfer:

[1] Note: Patients being admitted directly from an overseas health facility or who have received healthcare in an overseas facility in the past 12 months also require screening for other organisms of concern such as Carbapenemase producing *Enterobacterales*, Methicillin Resistant *Staphylococcus aureus* and Vancomycin Resistant *Enterococci*.

Place an alert on their electronic health or other medical record stating:

a. Known contact of C. auris (with date) and if readmitted within 12 months of contact, manage in a single room with contact precautions and screen for C. auris.

b. If the patient has been transferred to another health facility, including a residential aged care or disability care facility, either the transferring facility or the local public health unit are to notify the receiving facility. This ensures they are informed of the need for screening and preemptive isolation as described above.

c. All agencies involved in the transport are to be notified to ensure the transport vehicle is to be cleaned and disinfected after the patient is transported. Follow local cleaning and disinfection procedures.

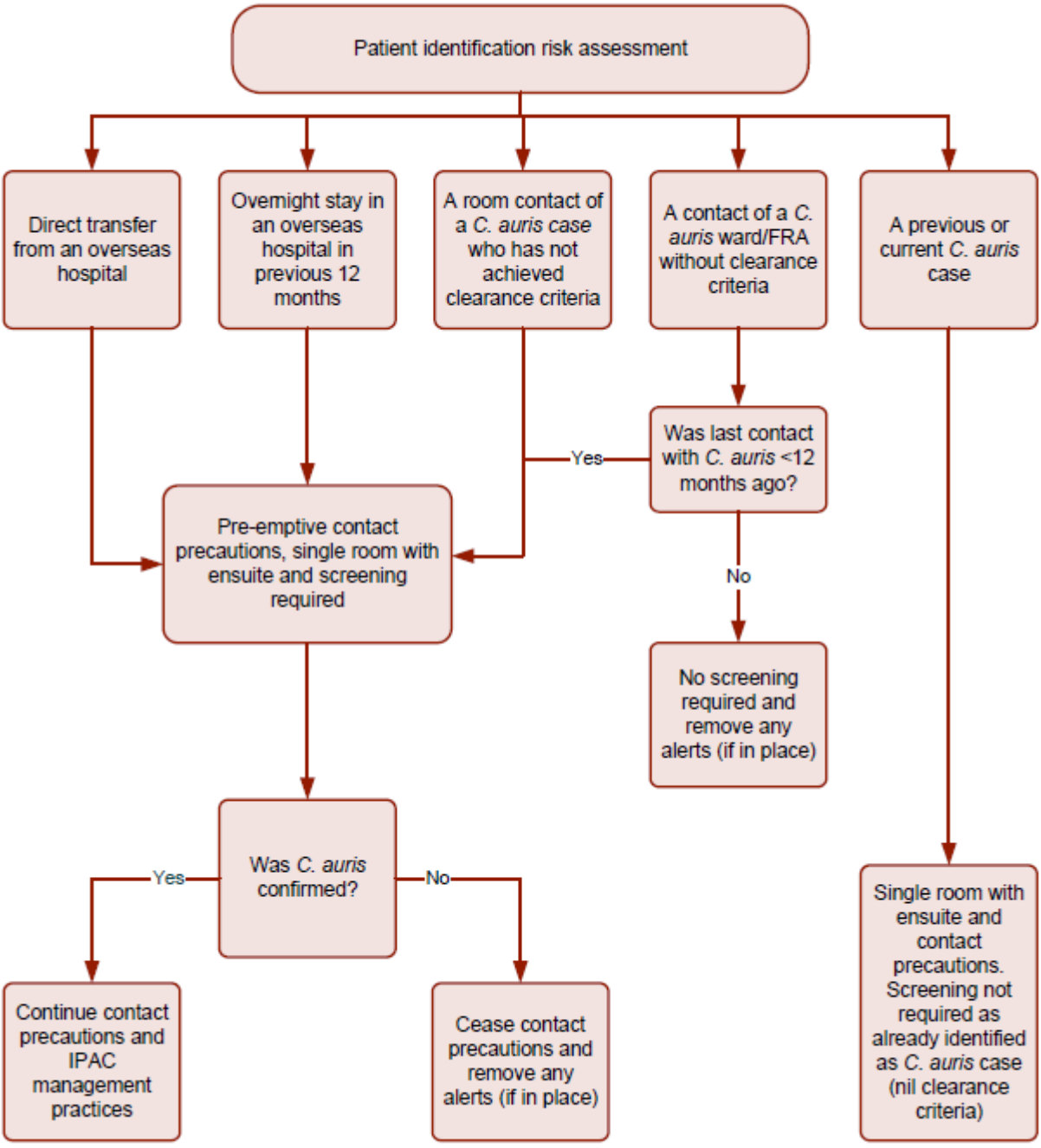
Alerts in hospital records may be removed after 12 months if screening has not occurred.

3.1.2. Ward contact

Ward contacts only need to be identified, and screening done where transmission has occurred beyond room contact(s) or the transmission source is unclear. A ward contact and any other associated transmission areas forms the functional risk area (FRA).

If ward contacts have been identified as requiring screening and are an inpatient, or have been discharged or transferred, they should be managed as per the room contact in Section 3.1.1 *Room contact*.

Figure 2. Patient identification risk assessment



Key legend:
IPAC – Infection prevention and control
FRA – functional risk area

Adapted from the Victorian guideline on *Candida auris*, Version 1.1 2023.

3.2. How to screen

The choice of screening sites generally includes the skin of the axilla and groin as these areas are most likely to be colonised with *C. auris*.

A standard wound swab should be used for both axillae and groins [17]. Rub all sides of the swab tip over each axilla targeting the crease in the skin where the arm meets the body. Using the same swab, rub both sides of the swab tip over the groin skin surface, targeting the inguinal crease ensuring both sides are swabbed. Place the swab stick into the collection tube. See the U.S Centers for Disease Control and Prevention (CDC) webpage *C. auris* Screening: Patient Swab Collection for more information.

Note: *C auris* screening must be specifically requested on the pathology order.

Each set of screening specimens, at a minimum should include bilateral axilla and groin (which are usually combined, check with your local pathology/ laboratory).

In addition to the above and particularly if there has been local transmission of *C. auris, the* following sites should also be considered for screening:

- nares and throat
- tracheostomy site and/or secretions
- urine from catheterised patients
- fluid from any drains
- wounds
- sites of indwelling devices.

3.3. Clearance criteria for contact screening

For patients who have contact screening the ideal number of screening “sets” to exclude colonisation is uncertain. Patients at higher risk of colonisation (direct transfer from an overseas health facility or room contact of a confirmed case) should have 3 screening sets

at least 24 hours apart, with the lower risk contacts (person having received healthcare overseas in the past 12 months, or ward contacts) having only one set of screening specimens.

Note: Additional screening can be conducted on the advice of the Incident Management Team (IMT), particularly in the context of local transmission.

Isolation for room contacts can be ceased once preliminary results are negative for all 3 screening sets taken at least 24 hours apart are negative for *C. auris,* or for lower risk contacts, on a single set of negative screening swabs[2].

[2] Note: A formal negative result will not be available for 10 days. Liaison with the pathology provider regarding likely negative results prior to 10 days is required.

3.4. Screening of health workers

Screening of health workers is not recommended unless there are strong epidemiological links that suggest transmission from one or more health workers. In an outbreak health workers may be transiently colonised with *C. auris*, but this is unlikely to be an important mode of transmission [18].

3.5. Screening of the environment

Environmental screening is not routinely recommended but should be considered as part of outbreak management if appropriate mitigation strategies have been put in place and there continues to be ongoing transmission of *C. auris*.

Any decision about environmental screening needs to be discussed with Infection Prevention and Control team and the relevant pathology provider.

4. Infection prevention and control

As *C. auris* is spread by contact, contact precautions (including standard precautions) are required. For detailed information on standard and contact precautions refer to the *Infection Prevention and Control Practice Handbook*. A summary of precautions is in Appendix 1 *Management of patients with C. auris in the acute healthcare setting.*

A patient colonised or infected with *C. auris* must be placed in a single room with a dedicated toilet or commode and managed with contact precautions for the duration of their stay and any subsequent hospital admissions. The length of *C. auris* colonisation is unclear and likely to be prolonged. Pre-emptive isolation and screening are recommended for close (room) contacts.

Enhanced cleaning and disinfection are required using an agent either with specific *C. auris* claims or is sporicidal, and on the Therapeutics Goods Administration Australian Register of Therapeutic Goods.

Note: Advice is the same whether there is *C. auris* colonisation or infection.

4.1. Local transmission

Local transmission is defined as epidemiological or laboratory evidence suggestive of transmission of *C. auris* from one patient to another within a healthcare facility. This can include transmission from the environment to a patient. If local transmission of *C. auris* is identified, action must be taken to prevent further patients being affected. Confirmation of local transmission by whole genome sequencing (WGS) should not delay management.

The following documents specifies that each NSW Health Organisation must have written procedures that address outbreak management for communicable diseases and multi-resistant organisms:

- NSW Health Policy Directive *Infection Prevention and Control in Healthcare Settings* (PD2023_025)

- *Infection Prevention and Control Practice Handbook*
- NSW Health Guideline *Triggers for Escalation Following Detection of Infection Outbreaks or Clusters* (GL2024_013).

If local transmission is identified, this should trigger a *C. auris* Outbreak Management Team (OMT). This may also require an Incident Management Team (IMT) convened by Health Protection NSW.

The OMT should comprise representatives of the following groups:

- clinical governance
- medical and nursing executive
- infection prevention and control
- infectious diseases/clinical microbiology
- relevant ward staff (for example, intensive care unit director and/or nurse unit manager)
- patient flow
- local Public Health Unit
- environmental services
- media/communications.

4.1.1. Outbreak management team

If local transmission is suspected or confirmed, the local infection prevention and control professionals and the OMT should follow their written outbreak management process. This would include reviewing relevant patient information and determine whether transmission has occurred and ensure the following actions are implemented[3]:

1. Designate the ward or geographic area as a functional risk area (FRA) where:
    - there are 2 or more confirmed cases of *C. auris*
    - and at least one case is locally acquired
    - and there is an epidemiological link between the 2 cases, either through proximity, or shared staff, equipment or other exposures including an environmental source.
2. Define the risk area timeframe (the period in which the functional area is of risk) as follows:
    - If one or more of the patients is either an inpatient or was discharged in the preceding 4 weeks, the timeframe will apply from the day the first *C. auris* case

[3] Note: The roles and responsibilities of the OMT will be determined by the local process and the OMT should provide advice and guidance on the below and delegate as appropriate

was admitted until there have been 4 consecutive weeks of negative room contact screens.

- If all the confirmed cases have been discharged for more than 4 weeks, the area will remain a risk area from the date of the first patient's admission to 4 weeks after the final patient was discharged. For example, if the first confirmed case was admitted on March 1 and the last case was discharged on March 30, then the period of risk is from March 1 to April 27.

3. Define the period of transmission risk to determine room contacts. This is the time period when a *C. auris* case could potentially transmit *C. auris* to another patient. This is the date of likely acquisition determined by the OMT/IMT until the case is placed into contact precautions (or discharged or transferred).
4. The local infection prevention and control professionals are to identify and notify room contacts as in Section 3.1.1 *Room contact*, and place alerts in medical records.
5. Commence a screening program:
    - Screen room contacts and ward contacts (if applicable) of known case/s as in Section 3.2 *How to screen*.
    - Screening includes room contacts of cases who have been discharged in the previous 4 weeks.
    - Screening of room contacts should be done weekly until there has been 4 consecutive weeks with no transmission.
    - If all cases have been discharged for more than 4 weeks, any room contact who remains an inpatient should be screened on one occasion only.
    - If patients identified as room or ward contacts have been transferred to another ward or another facility, the infection prevention and control professionals or the local public health unit should inform the receiving ward or facility of the need for screening and an alert to be placed on their medical record.
    - If patients have been discharged before clearance criteria are met, an alert needs to be placed on their medical record to ensure that if readmitted, they are placed into contact precautions and screened for *C. auris*. The patient's general practitioner (GP) is to be notified of contact. Direct patient notification can be done after discussion with the local infection prevention and control professionals and the OMT.
6. Manage transfer of patients into and out of the affected ward/s while transmission remains a risk:
    - Ensure ward contacts are screened prior to transfer to another ward or facility.
    - Inform the receiving ward or facility that the patient is a ward contact.
7. If the patient is being transferred to a residential care facility, screen prior to discharge and manage as a suspect case with appropriate precautions until at least preliminary results are negative. Information for residential care facilities for managing patients

with *C. auris* can be found in Appendix 2 *Management of patients with C. auris in the subacute healthcare setting*.

8. Maintain a line list of all room and ward contacts including their screening results until the transmission risk period is closed, and ensure documentation is complete.
9. Continue to have regular meetings until transmission risk period is closed (there have been no new cases for at least 4 weeks) and appropriate screening of contacts has occurred as outlined above.
10. Participate in any debrief as managed by the OMT/IMT.

4.1.2. Communication

If there is local transmission of *C. auris* the OMT need to immediately provide information to relevant teams and the hospital executive using local communication pathways to ensure resources are available for screening and control measures.

Local transmission of *C. auris* are to be reported to the local Public Health Unit and the Clinical Excellence Commission.

4.2. Actions to reduce transmission risk

If transmission of C. auris has been identified, the following actions must be taken to reduce further transmission.

These are detailed in Appendix 1 *Management of patients with C. auris in the acute healthcare settings*.

Cleaning and disinfection

Review environmental cleaning, ensure cleaning and disinfection products used are effective against *C. auris,* ensure cleaning meets current standards and all high touch areas are frequently cleaned.

Audit

Consider auditing the implementation of standard precautions, hand hygiene, contact precaution and/or environmental cleaning.

Review

Patient and family/carer understanding of hand hygiene and the need for the patient to stay in their room where possible.

Cohorting

If there is ongoing transmission, consider cohorting patients after discussion with infection prevention and control team and the OMT.

Ward closure

If there is ongoing transmission, then consider whether ward closure is required. This could include restricting transfers in from other facilities and/or restricting transfers to other facilities while contact screening is pending.

Environmental screening

If there is evidence of local transmission that suggests an environmental source, environmental screening may be considered to determine if there is an environmental reservoir. Choice and number of sampling sites will be done in consultation between the OMT, IMT, NSW Health Pathology and/or the relevant pathology provider.

Facilities receiving patients who are contacts of C. auris who have not met clearance criteria

Patients who are contacts and have not met clearance criteria, the receiving facility to be notified upon transfer.

Patients who are still inpatients need to be notified of the possible contact and are recommended to have screening as outlined in Section 3 *Screening, detection and investigation*.

Patients who have been discharged need to have an alert added to the electronic health record or similar stating they are a contact and need to be managed under contact precautions and should be screened for *C. auris* if they have a readmission within 12 months of the contact date.

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6. Appendices

1. Management of patients with *C. auris* in the acute healthcare setting
2. Management of patients with *C. auris* in the ambulatory healthcare setting
3. Management of patients with *C. auris* in the ambulatory healthcare setting
4. Management of patients with *C. auris* in residential care facilities
5. Management of patients with *C. auris* in hydrotherapy pools
6. Implementation checklist

6.1. Management of patients with *C. auris* in the acute healthcare setting

Infection prevention and control measures	Actions required
Prevention of transmission	• Ensure standard precautions are in place. • Implement contact precautions including patient isolation. • Limit non-essential patient movement. • Use single patient equipment and devices where possible.
Patient placement	• Patients should be placed in a single room with ensuite bathroom. • If a single room with an ensuite is not available, use a single room with access to either a dedicated toilet or commode. • Patients with confirmed *C. auris* may be cohorted except if they are also colonised with another multidrug resistant organism such as Carbapenemase-producing *Enterobacterales*. • Any decision to cohort patients should be done in conjunction with the local infection prevention and control team. • Bed movements must be kept to a minimum but not compromise essential treatment or investigations.
Standard precautions	• Perform hand hygiene with alcohol-based hand rub (AHBR) or wash with soap and water. ABHR is preferred but wash hands with soap and water if visibly soiled. • Use personal protective equipment (PPE). • Needle-stick and sharps injury prevention. • Cleaning and disinfection of the environment. • Reprocess reusable medical devices and equipment. • Respiratory hygiene and cough etiquette. • Aseptic technique. • Waste disposal. • Appropriate linen management.
Contact precautions	• Appropriate patient placement (single room or cohorting). • Hand hygiene. • Appropriate PPE selection and use, based on risk assessment • Gloves as per standard precautions, don immediately before patient contact and change between different tasks on same patient and must be changed between patients. • Use disposable medical equipment if available, dedicate equipment to the patient. • Clean and disinfect reusable shared equipment in between use. • Enhanced cleaning of patient care areas. • Limit movement of patients where possible.

Infection prevention and control measures	Actions required
Alerts and communication	• Signage indicating contact precautions should be displayed outside the room, or at the patient bedspace until transferred to a single room. • Place an alert in the patient's medical record. Ensure the alert includes information on infection prevention and control for subsequent admissions. • As the duration of colonisation is unclear and there are no agreed clearance criteria for confirmed cases, the alert should remain on the patient's file indefinitely. • Notify local Public Health Unit (may be from the laboratory). • On discharge or transfer from hospital, the patient's general practitioner (GP), any transport and/or receiving facilities must be notified of the patient's *C. auris* status. • A positive *C. auris* result on its own should not defer or delay transfer or discharge from the health facility.
Contact tracing and screening	• Determine period of transmission. • Identify room contacts and/or ward contacts and provide information on screening. • Screen at a minimum, both axillae and groin.
Laboratory	Liaise with pathology/laboratory provider prior to screening. Notify local Public Health Unit within 24 hours by telephone.
Inform and educate the patient and family	Provide information to the patient and family/carers on *C. auris* including: • The need for contact precautions and isolation. • Hand hygiene and ensure easy access to hand hygiene products. • The need for the patient to remain in their room. • Patients being screened need information about why this is being done. If a patient is a contact and has been discharged from hospital before being screened, this should be done on readmission to the health facility with an appropriate explanation. • As the duration of colonisation is unclear, discuss the need for precautionary isolation and contact precautions for any future admissions, including day-only for procedures such as dialysis or day-only treatment (chemotherapy).

Inform and educate health providers	• Infection prevention and control team must have a process for providing education to health workers about the nature and implications of *C. auris* colonisation or infection. This may include refresher education about:
	  ○ hand hygiene
	  ○ standard precautions
	  ○ contact precautions
	  ○ cleaning and disinfection of reusable medical devices, patient equipment, and environment.

Infection prevention and control measures	Actions required
	• Relevant health workers will need information on screening of patients and method for taking swabs. • Ensure all relevant health workers are notified of the patient's *C. auris* status. • Ensure positive *C. auris* status is communicated prior to transport within a facility or transfer to another facility including residential aged care. • Inform the patient's GP of the *C. auris* status on discharge.
Visitors	• There are no restrictions for visitors based on *C. auris* isolation. • They do not need to wear PPE (gloves and gowns) unless assisting with personal care such as bathing and/or toileting. • Visitors are to be informed not to visit other patients in the NSW Health Organisation immediately after visiting a patient with *C. auris* and are recommended to wash their hands before and after visiting any patient in hospital.
Cleaning and disinfection of shared equipment	• Wherever possible, use single use patient equipment. • If not available, equipment should be dedicated for the use of one patient for the duration of their admission. • If equipment is to be used between patients, it must be cleaned and disinfected according to the manufacturer's instructions. • The room should be free of clutter; consumables and equipment to be kept to a minimum.
Environmental cleaning	• Clean and disinfect the patient's room and any associated equipment with a product in accordance with the Therapeutic Goods Administration regulation of disinfectants that have a specific claim about *C. auris* activity or are sporicidal. These products are usually sodium hypochlorite based, but peracetic acid and accelerated hydrogen peroxide agents may be alternatives. • Quaternary ammonium containing disinfectants have unreliable activity against *C. auris* and should not be used for either the environment or equipment. It is important to note that some of the commonly used disinfectant wipes contain quaternary ammonium and these should not be used [22] [23]. • Cleaning of the patient's environment should be increased with twice daily cleaning and disinfection of the room and bathroom. Careful attention to high-touch surfaces (for example, bed rails, call bells, IV pump) is needed and these should be cleaned and disinfected twice daily. • Discharge cleaning and disinfection should be as for a terminal clean including changing of curtains. Refer to the Clinical Excellence Commission *Environmental Cleaning Standard Operating Procedure* for more information.
Transport	• Medical transport services must be informed of a patient's status at the time of booking and patients with *C. auris* must be transported alone. Multi loading should not be performed

Infection prevention and control measures	Actions required
	• Contact precautions in addition to standard precautions are to be maintained for the patient's transport. • The vehicle must be cleaned and disinfected with products in accordance with the Therapeutic Goods Administration regulation of disinfectants that have a specific claim about *C. auris* activity or are sporicidal.
Waste management	• Manage as per standard precautions.
Linen	• Manage as per standard precautions.
Treatment	• Patients who are colonised with *C. auris* do not require specific treatment. • There is no recognised method for effective decolonisation. Chlorhexidine body washes have been used in an outbreak situation, but the literature does not support chlorhexidine body washes to be effective in either reducing the risk of colonisation or invasive infection. • Patients who have an invasive infection with *C. auris* need to be treated in consultation with infectious disease and/or microbiology professionals and in agreement with local antimicrobial stewardship processes.

6.2. Management of patients with *C. auris* in the subacute healthcare setting

Patient care activities in the subacute or rehabilitation healthcare setting are different from those in the acute healthcare setting. Patients are generally more ambulant and frequently participate in group activities or attend communal areas such as gymnasiums.

Personal Protective Equipment (PPE) – Contact precautions

PPE is to be worn according to local policy.

When in the patient's room staff should use a long-sleeved gown and gloves when attending to a patient's personal care and if likely to come into contact with body fluids.

Use PPE during activities outside the patient's room:

- If personal care is being provided (for example, toileting), PPE should be worn (long sleeved gown and gloves).
- Hand hygiene is required as per the NSW Health Policy Directive *Infection Prevention and Control in Healthcare Settings* (PD2023_025).
- When local transmission is suspected or confirmed, PPE requirements may be reviewed by an outbreak management team.

Patient equipment

Single patient use equipment should be used where possible. Where this is not possible, equipment should be dedicated to the one patient. If equipment must be shared between patients, ensure the equipment has been thoroughly cleaned and disinfected using a sporicidal disinfectant before use on another patient.

Usual cleaning of equipment used in group activities (for example, gymnasium equipment, weights) should continue at the end of any gym session with the addition of a sporicidal disinfectant after use by a patient with *C. auris*.

Movement of patients

Unless a patient is unwell (for example, has diarrhoea) or they have wounds with uncontainable ooze, they may freely attend shared areas such as the dining room, and group activities.

Patients should be assisted and/or educated to perform hand hygiene when they leave their room and if entering a communal area. Patients' personal hygiene should be maintained, and clean clothes worn when outside their room. Ensure wounds are covered with a dressing that contains any ooze.

Avoid using toilets outside the patient's room, however, if it is necessary, ensure cleaning and disinfection with a sporicidal product occurs after toilet use or use a commode where possible which must also be cleaned and disinfected afterwards.

6.3. Management of patients with *C. auris* in the ambulatory healthcare setting

In this Guideline, ambulatory healthcare settings do not include outpatient clinics. Haemodialysis and day oncology units are in scope and have several differences compared to the acute healthcare setting. Patients are generally only admitted for a few hours and access to single rooms is often limited. In this setting, the application of some of the above precautions may be difficult and require modification.

Room and bathroom

Patients should be placed in a single room with their own ensuite or bathroom for the duration of their day admission. If a single room is unavailable, then patients with *C. auris* should be placed away from other patients (for example, at the end of the row) and a toilet or commode should be dedicated to the patient for the duration of their day admission where possible.

Personal Protective Equipment (PPE)

A long-sleeved gown or apron and gloves should be worn when undertaking procedures (for example, IV cannula insertion) or assisting a patient to toilet. Gloves must be changed during patient care in accordance with NSW Health Policy Directive *Infection Prevention and Control in Healthcare Settings* (PD2023_025) and/or *Infection Prevention and Control Practice Handbook*.

Movement of patients

Patients should be restricted to their rooms or chairs.

Patients should be assisted and/or educated to attend to their hand hygiene as previously described.

Wounds should be covered with a dressing that contains any ooze.

Environmental cleaning and disinfection

The patient's immediate environment and surrounds (for example, chair and surrounds) must be thoroughly cleaned and disinfected on discharge. The disinfectant used must be sporicidal (refer to Appendix 1 *Management of patients with C. auris in the acute healthcare setting*).

6.4. Management of patients with *C. auris* in residential care facilities

Room and bathroom

Where possible, residents with *C. auris* should have a single room with its own ensuite. If sharing a room is unavoidable, consider the following:

- Resident/s who share a room with a *C. auris* case should not have indwelling medical devices or open wounds.
- If a roommate is transferred to a healthcare facility, notify the facility that the resident shares a room with a *C. auris* case for the receiving facility to be able to undertake screening.

Personal Protective Equipment (PPE)

Use a gown or apron and gloves when attending to a resident's personal care, PPE does not need to be used for other 'casual' contact by staff. Hand hygiene must be performed at all times before donning gloves and after doffing gloves.

Patient equipment

Use disposable equipment where possible or dedicate use of non-disposable equipment to any residents with *C. auris* (for example, commode). If equipment must be shared (for example, lifting machine) for multiple residents, ensure the equipment has been cleaned and disinfected (with a sporicidal product) before use on another resident. No special precautions are required for linen management, dishes, and cutlery, beyond those covered by standard precautions.

Movement of patients

Residents with *C. auris* can continue to participate in group activities unless they are unwell (for example, have diarrhoea). Any wounds should be covered with a dressing that contains the wound ooze. Residents can attend a shared dining area and other common communal areas.

Environmental cleaning and disinfection

Routine cleaning should be intensified when there is a resident/s with *C. auris*. Rooms of residents with *C. auris* should be prioritised with a weekly full clean. Daily cleaning and disinfection of the bathroom, frequently touched surfaces (for example, bed rails, overbed table, commode, toilet surfaces in resident bathrooms, doorknobs) and equipment in the immediate vicinity of the resident should be instituted.

Visitors

Visitors do not need to use gowns/aprons and gloves when visiting a resident in contact precautions unless they will be helping in personal care such as showering or toileting. Visitors must also be encouraged to perform hand hygiene before entering and after leaving the room.

6.5. Management of patients with *C. auris* in hydrotherapy pools

Patients with *C. auris* may be required to access hydrotherapy pools as part of their rehabilitation program. A patient with *C. auris* should be permitted to attend a hydrotherapy pool and not be excluded merely because they are colonised or infected with *C. auris*. A risk assessment of all patients should be undertaken prior to hydrotherapy to determine their suitability. A risk assessment should include, but not be limited to, whether the patient is continent of urine or faeces, has an active infection or is colonised and if they have any wounds present.

All patients must shower (washing with soap and water) immediately before entering the pool. Hydrotherapy should be deferred if the patient is unwell, has loose bowel motions or have open wounds.

Personal Protective Equipment (PPE)

In general, staff will not need to wear PPE unless providing close personal care, such as toileting. PPE may also be required with mobility assistance, such as if transferring patients in and out of the pool.

Patient equipment

Where possible, dedicate the use of equipment to one patient. If equipment must be shared between patients, ensure the equipment has been cleaned and disinfected with a sporicidal product before use on another patient.

If a sling is used to transfer the patient in and out of the pool, the sling should be dedicated to the use of that patient for the duration of their rehabilitation. Following use, the sling will need to be laundered prior to use on another patient.

Wounds

Patients with a wound may be able to participate in hydrotherapy. All wounds should be covered with an occlusive dressing to prevent exudate from leaking and keep the wound protected. Patients with heavily discharging wounds that are not able to be adequately contained within a dressing should not enter the pool.

More information

Further information about infection control precautions for hydrotherapy pools and management of patients can be found in the Australian Physiotherapy Association *Australian guidelines for aquatic physiotherapists working in and/or managing hydrotherapy pools*, second edition, 2015.

6.6. Implementation checklist

LHD/SHN Facility	Assessed By	Date

Implementation Requirements	Not applicable	Not started	Partially	Compliant	Action Required
Local process in place for *C. auris* risk assessment at admission (emergency transfer or planned) for a patient with suspected or confirmed *C. auris*	☐	☐	☐	☐	
Development of a communication flowchart/plan for increasing cases, patient to patient transmission or outbreaks:	☐	☐	☐	☐	
When to escalate within the facility	☐	☐	☐	☐	
When to escalate within the LHD/SHN	☐	☐	☐	☐	
When to escalate to the local Public Health Unit/Clinical Excellence Commission	☐	☐	☐	☐	
Health facility has identified which units/wards are considered to have higher risk due to local risk assessment and/or epidemiological factors	☐	☐	☐	☐	
Local process for identifying, collecting, and following up screening specimens determined	☐	☐	☐	☐	
Local process for assessing ongoing carriage of *C. auris* is determined	☐	☐	☐	☐	
Templates modified to suit local needs	☐	☐	☐	☐	
Local plan for staff education on *C. auris* management inclusive of mandatory infection prevention and control training	☐	☐	☐	☐	

Implementation Requirements	Not applicable	Not started	Partially	Compliant	Action Required
Local procedure/s for outbreak management reviewed	☐	☐	☐	☐	
Local cleaning procedures reviewed to include *C. auris*	☐	☐	☐	☐	
Local Antimicrobial Stewardship (AMS) procedures reviewed to include management of *C. auris*	☐	☐	☐	☐	
Development of a surveillance plan for *C. auris* in the event of an outbreak	☐	☐	☐	☐	
Development of a reporting system to local/LHD/SHN infection prevention and control committee on:					
C. auris surveillance trends	☐	☐	☐	☐	
Barriers or challenges to implementation of this Guideline	☐	☐	☐	☐	
Incidents (including patient to patient transmission, outbreaks, breaches of infection prevention and control)	☐	☐	☐	☐	
Education programs	☐	☐	☐	☐	
Adherence to screening programs	☐	☐	☐	☐	