



Infection Prevention and Control Inpatient Placement and Cohorting Guideline

1. Purpose

This guideline is intended to support the decision-making of nurses, doctors, bed managers, patient flow managers and after-hours managers in the most appropriate bed allocation within Western Australian Country Health Services (WACHS), particularly when local infection prevention and control (IPC) advice is not available. Collaboration with the local IPC service should be sought as soon as possible. This guidance is particularly important in the context of a pandemic or local outbreak. Patient placement is a two-step process that is informed by a risk assessment followed by prioritisation of the seriousness of the infection and any competing patient needs.

The latest version of the [Series of National Guidelines \(SoNGs\)](#) developed in consultation with the Communicable Diseases Network Australia (CDNA), the Australian Commission on Safety and Quality in Healthcare (ACSQHC) Guidelines, such as the [Patient Placement Guide – Infection Prevention and Control](#) and the [WA Health IPC policies and guidelines](#) including the [WA Health COVID-19 IPC Guidelines](#) should also be referred to for practice guidance.

2. Guideline Statement

2.1 Risk Assessment

The placement of patients in any clinical area should be considered, and risk assessed according to several factors, including, but not limited to:

- Whether the patient is suspected or known to be colonised or infected with a highly transmissible or epidemiologically significant pathogen (such as a multidrug-resistant organism)
- Whether the patient has signs and symptoms that raise suspicion of the presence of an infectious condition
- How the known or suspected infectious organism is transmitted, and
- The period of time transmission-based precautions should be used. Guidance on factors to be considered when conducting a risk assessment to inform patient placement is provided in [Appendix A](#).

2.2 Prioritisation

- The prioritisation of single room isolation, or other arrangements when a single room is not available, is not just dependent on the mode of transmission and infectivity of the pathogen, but also on the seriousness of the infection to other individuals.
- Recommendations on the prioritisation of specific infectious conditions are provided in [Appendix B](#).
- Single rooms are preferred for all patients requiring isolation for infectious conditions and are always indicated for patients requiring airborne precautions (ideally with negative pressure ventilation).
- Designated bathroom facilities should be available.

- Appropriate signage displayed outside the room.
- For patients under droplet and airborne precautions the door should be kept closed, where possible.
- Consideration of competing needs must also be considered, such as patients requiring end-of-life care; those who are immunosuppressed; patients with a higher need for privacy and dignity; or those requiring reduction of harm afforded by a single room.

2.3 Priority Guide

Transmission-based precautions should be applied in addition to standard precautions, in accordance with the [Australian Guidelines for the Prevention and Control of Infections in Healthcare \(2019\)](#), and jurisdictional guidance. Depending on the infectious organism and its mode of transmission, one or more types of transmission-based precautions may be required.

[Appendix B](#) includes common infectious conditions however is not exhaustive.

For a more extensive list of infectious conditions refer to *Appendix 6.4 - Type and duration of precautions for specific infections and conditions* of the [Australian Guidelines for the Prevention and Control of Infections in Healthcare \(2019\)](#). In this table, infectious conditions are listed in each priority group in alphabetical order and not in any ranking of importance. In the case of more than one condition from any priority group presenting at any one-time, local policy and risk assessment should inform the bed placement decision.

Implications for placement of patients without a transmissible disease

In general, patients not suspected to have a transmissible disease can be admitted to the same section of a hospital / ward / unit, if all patients are appropriately managed using standard and transmission-based precautions and appropriate room placement, relevant to their admission requirements (refer to [Appendix B](#)).

Inpatient placement for patients with transmissible diseases

- For patients with probable or confirmed airborne transmissible diseases, the use of a Negative Pressure Isolation Room (NPIR) should be implemented where available, or the use of a standard single room with ensuite, a negative air flow from the corridor and adjacent areas and an air purifier (refer to WACHS [Negative Pressure Isolation Room \(NPIR\) Procedure](#)).
- If this option is unavailable, use a single room and allocate a dedicated bathroom / toilet. NB: Toilet lids should be closed prior to flushing to minimise risk of aerosolisation.
- When a single room is not available, or there are insufficient isolation facilities for the number of suspected or confirmed infectious patients, consultation with the local IPC service is recommended to assess the various risks associated with other patient placement options (e.g. cohorting).
- In some circumstances where single room availability has been depleted, it may be determined that patients with the same diagnosed transmissible disease can share a multi-bed area. This is known as cohorting. A designated isolation area / grouped area of single rooms may be used and requirements for this are discussed below. This may assist in provision of safe and efficient care for this patient group to comply with IPC care guidelines. e.g. being able to dedicate staff, reduce traffic flow through the area, assist with judicious use of Personal Protective Equipment (PPE) and facilitate meal

and medication deliveries in a timely fashion (refer to WACHS [Personal Protective Equipment \(PPE\) Procedure](#)).

- Staff providing care to patients with transmissible diseases must adhere to the current recommended guidelines.

Care of inpatients in a cohort bay/room/area/ward/unit (i.e. cohort care area)

- The decision to create a cohort care area will need to be undertaken in discussion with Healthcare Facility (HCF) Executives, Clinical Leads, Infectious Diseases Physicians and the IPC team.
- A cohort care area is a bay/room/area/ward/unit in which a group of patients with the **same** confirmed infection are placed together if required, usually within the same physical space (cohorting). Cohorting of patients usually means caring for patients in a multi bedded room with a shared bathroom.
- Patients without the same confirmed transmissible disease are not to be cohorted with patients who have not yet been diagnosed.
- Clear signage indicating the appropriate transmission-based precautions and required PPE is to be placed at the entrance of the cohort care area.
- HCFs may consider creating cohort care areas, especially in those facilities where heating, ventilation air conditioning (HVAC) systems can be isolated. Cohort care areas should be separate from other patient areas and are not to be used as a thoroughfare. A review of HVAC systems, air flows and air exchanges should be undertaken before any area is designated as an isolation or cohort care area.
- Cohorting is always utilised in combination with other IPC measures e.g. hand hygiene, appropriate PPE use and environmental decontamination (refer to WACHS [Hand Hygiene Policy](#)).
- The number of persons entering the cohort care area should be limited to the minimum number necessary for patient care and support.
- HCFs should consider reducing bed numbers in shared rooms e.g. if a four-bed room, reduce occupancy to two beds.
- Patients can be encouraged to wear a surgical mask as relevant, if their clinical condition allows.
- The cohort care area may be divided into zones such as red and amber. HCFs may designate amber zones where gowns and gloves may be removed (with relevant mask and protective eyewear left in situ) e.g. the nurse's station or treatment room. These zones must be clearly identified.
- All dedicated healthcare workers (HCWs) should have completed a practical assessment for donning and doffing PPE.
- Patients should be separated by at least 1.5 from each other in a cohort care area and bed curtains can be drawn as an additional physical barrier

PPE usage in a cohort care area

- In a cohort care area, eye protection, masks and gowns may remain insitu between patients, providing they are not damaged or soiled. Gloves must be changed between patients, and between different procedures on the same patient e.g. catheter care and administration of intravenous therapy. Adherence to the '5 Moments' of hand hygiene is essential.
- Gowns may be required to be changed between care on each patient, particularly if patient contact with the gown has occurred OR consideration should be given to the use of an apron which better facilitates appropriate hand hygiene. Following extensive

patient contact, (e.g. providing care such as dressing large or complex wounds; hygiene cares for incontinent clients; pressure area care when a client is fully dependent; urinary catheter cares) gown and gloves must be changed and hand hygiene performed as per the 5 moments for hand hygiene.

- Upon leaving the cohort care area all PPE must be removed and discarded.
- Gowns and gloves should **not** be worn in common areas e.g. accessing linen cupboards, storerooms, clerical desk areas, staff rooms etc.
- Maintain strict adherence to hand hygiene and environmental cleaning. A minimum of twice daily cleaning and disinfection of frequently touched surfaces must be undertaken in the cohort care area. (i.e. include all general surfaces, patient bed areas and frequently touched objects such as monitors, light switches and tray tables, trolleys, communal stock trays, keyboards, screens) (refer to WACHS [Environmental Cleaning Policy](#)).
- Additional cleaning of shared bathroom areas **must** be implemented, and these areas should be routinely cleaned and disinfected **at least** twice a day. Patients should be advised to inform nursing staff when they have used the shower facilities or if the area is noted to be visibly soiled, so arrangements can be made for the bathroom to be cleaned and disinfected between routine cleaning times.

Establishing a cohort care area

- When determining the location of the cohort care area, the following should be considered:
 - the ability to isolate the air handling system, particularly if AGPs are to be performed
 - the ability to limit entry / access
 - the ability to ensure standard, contact and airborne precautions can be maintained at all times
 - necessary equipment availability
 - spatial separation of greater than 1.5 metres between bed spaces
 - patient populations of adjacent areas to the cohort care area should be physically separated (and preferably some distance) from patients who are potentially at greater risk of complications from transmissible diseases (for example, haematology, oncology and transplant services).
- Whenever possible, curtains, privacy screens or barriers should be used to physically separate patients.
- Patient transport for patients should be limited where possible by having necessary equipment (e.g. portable X-ray) available in cohort areas.
- Patient medical equipment should be disposable where possible or dedicated to the cohort care area and cleaned and disinfected **between each patient use**.

Staffing a cohort care area

- Cohort nursing is the use of a dedicated team of healthcare staff to care for patients within a cohort care area.
- Whenever possible, HCWs assigned to a cohort care area should be experienced HCWs and should not float or be assigned to other patient care areas.
- The number of persons entering the cohort care area should be limited to the minimum number necessary for patient care and support.

3. Roles and Responsibilities

WACHS Executive and Regional Executive teams are responsible for ensuring the processes outlined in the relevant National Safety and Quality Health Service Standards are in place.

Managers and supervisors are responsible for monitoring compliance of relevant staff to this procedure.

All staff are required to work within policies and guidelines to make sure that WACHS is a safe, equitable and positive place to be and all WACHS HCWs involved in patient placement have a responsibility to ensure they comply with this procedure.

4. Monitoring and Evaluation

4.1 Monitoring

Annual monitoring and evaluation of infection prevention and control systems in place based on the regional resources and risk management strategies using the quality cycle shall include, but are not limited to the following:

- audits that should include adherence to standard precautions, transmission-based precautions, aseptic technique, hand hygiene practices, hand hygiene product placement bare below the elbow practices, waste management processes and cleaning practices
- process indicator audits of clinical practice e.g. peripheral vascular device and central line insertion procedure
- outcome indicators for healthcare associated infections (clinical Indicators) e.g. surgical site infections (SSI), Multi-resistant organism monitoring (e.g. MRSA, VRE), occupational exposure to blood and body fluids.

4.2 Evaluation

The WACHS Infection Control Advisory Forum (ICAF) will review this guideline every five (5) years, or earlier if required and evaluate the monitoring systems in place.

This will include:

- review of patient incidents and / or healthcare worker incidents related to cross transmission and subsequent analysis of cluster / outbreak management
- PPE training monitoring and assessment practices
- review of audit results related to IPC and assessment of relevant actions that are required to be implemented
- review of additional monitoring or auditing practices that should be implemented based on the findings of current audits undertaken
- escalation of issues identified / concerns raised to relevant committees for review.

5. Compliance

5.1 Compliance Statement

Guidelines are designed to provide staff with evidence-based recommendations to support appropriate actions in specific settings and circumstances. As such, WACHS guidelines

should be followed in the first instance. In the clinical context, where a patient's management should vary from an endorsed WACHS guideline, this variation and the clinical opinion as to reasons for variation must be documented in accordance with the [Documentation Clinical Practice Standard](#).

WACHS staff are reminded that compliance with all policies is mandatory.

6. References

[Coronavirus Disease 2019 \(COVID-19\) CDNA National Guidelines for Public Health Units current version](#)

[WA Health - COVID-19 Infection prevention and control \(IPC\) in hospitals guidelines](#)

[WACHS Personal Protective Equipment \(PPE\) procedure](#)

[WA Health - Identification and Use of Personal Protective Equipment in the Clinical Setting During the Coronavirus \(COVID-19\) Pandemic Policy](#)

7. Definitions

Term	Definition
Airborne precautions	A set of infection prevention practices used for patients known or suspected to be infected with pathogens transmitted person-to-person by the airborne route via particles in the respirable size range that remain infective over time and distance. Airborne precautions require the use of a particulate filter respirator (PFR), protective eyewear and other PPE as required as per standard precautions. The patient is accommodated in a negative pressure isolation room (NPIR) when possible.
Aerosols	Aerosols are microscopic particles < 5 microns in size that are the residue of evaporated droplets and are produced when a person coughs, sneezes, shouts, or sings. These particles can remain suspended in the air for prolonged periods of time and can be carried on normal air currents in a room or beyond, to adjacent spaces or areas.
Cohort Care Area	A cohort care area is a bay/room/area/ward/unit in which a group of patients with the same confirmed infection are placed together if required, usually within the same physical space (cohorting).
Cohorting	Cohorting: cohorting refers to the grouping of individuals with the same condition and or same laboratory confirmed organisms in the same location e.g. room, ward section, ward or building).
Particulate Filter Respirators (PFR)	Respirators that filter at least 94 percent of 0.3- micron particles from the air. PFRs are used when implementing airborne precautions. Both P2 and N95 respirators are appropriate for use with airborne precautions.

Personal Protective Equipment (PPE)	PPE in healthcare includes surgical masks, particulate filter respirators (such as P2 or N95), gloves, goggles, glasses, face shields, gowns and aprons.
WA health system	The WA health system is comprised of: <ul style="list-style-type: none"> (i) the Department; (ii) health service providers (NMHS, SMHS, CAHS, WACHS, EMHS, PathWest, Quadriplegic Centre and HSS); and (iii) contracted health entities, to the extent they provide health services to the State.

8. Document summary

Coverage	WACHS-wide
Audience	All Staff
Records Management	Clinical: Health Record Management Policy
Related Legislation	Health Services Act 2016 (WA)
Related Mandatory Policies / Frameworks	Coronavirus Disease - 2019 (COVID-19) Infection Prevention and Control in Western Australian Healthcare Facilities
Related WACHS Policy Documents	Environmental Cleaning Policy Hand Hygiene Policy Negative Pressure Isolation Room (NPIR) Procedure Personal Protective Equipment (PPE) Procedure
Other Related Documents	Coronavirus Disease 2019 (COVID-19) CDNA National Guidelines for Public Health Units current version Australian Guidelines for the Prevention and Control of Infections in Healthcare (2019)
Related Forms	MR1 WACHS Emergency Department Notes
Aboriginal Health Impact Statement Declaration (ISD)	The completion of an Aboriginal Health Impact Statement and declaration (ISD) is required. For further information, please see the ISD Guidelines . Does this policy document have impact on the cultural or clinical needs of Aboriginal people? NO ISD Record ID: 1598
National Safety and Quality Health Service (NSQHS) Standards	1.29, 1.30, 3.01, 3.02, 3.03, 3.04, 3.05, 3.06, 3.07, 3.08, 3.09, 3.10, 3.15, 3.16, 5.10, 5.11
Aged Care Quality Agency Accreditation Standards	2(3)(a), 3(1), 3(3)(a)(b)(g)(i)(ii), 5(3)(b)(c)
National Standards for Mental Health	1.1, 1.6, 1.7

National Standards for Disability Services	1.1, 1.9, 2.3, 6.7
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9. Document Control

Version	Effective Date	Author	Summary of changes (developer to complete)
1.00	28 July 2022	Clinical Nurse Consultant – Infection Prevention and Control	The document has had the purpose expanded from being a COVID-19 specific document to having a broader purpose.

10. Approval

Policy Owner	Executive Director Nursing and Midwifery
Co-approver	Executive Director Clinical Excellence
Contact	Central Office CNC IPC (S. Kenny)
Business Unit	WACHS Nursing and Midwifery
EDRMS #	ED-CO-22-241698
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This document can be made available in alternative formats on request.

Appendix A: Risk Assessment

RISK FACTORS	Source and modes of transmission	Clinical predictors of transmission	Clinical impact of transmission	Room availability
Questions for Consideration	<ul style="list-style-type: none"> Is human to human transmission known? Is/are the mode/s of transmission known? Has the person recently returned from overseas travel? What is the infectivity of the organism? 	<ul style="list-style-type: none"> Does the patient have factors that would increase the risk of transmission? 	<ul style="list-style-type: none"> How susceptible are other patients in the area? What is the morbidity and mortality associated with the organism/condition disease? Will the safety of the individual who is to be isolated be affected? 	<ul style="list-style-type: none"> What is the availability of negative pressure isolation rooms? What competing priorities exist for single room provision? Are single rooms with designated toilet facilities available? Are there other patients with the same organism, species and/or strain that could be cohorted?
Examples	<ul style="list-style-type: none"> Suspected or confirmed acute respiratory infection Public health notification 	<ul style="list-style-type: none"> Wandering Cognitive impairment Incontinence Broken skin Open/draining wounds Invasive devices Poor hygiene practices Clinical symptoms such as: <ul style="list-style-type: none"> Diarrhoea Vomiting Coughing Sneezing 	<ul style="list-style-type: none"> Organism not easily transmitted but associated with high mortality rate Immunosuppressed patients Neonates and young children Elderly patients Patients with burns Renal patients Pregnant women 	<ul style="list-style-type: none"> Patients requiring high security or one-on-one observation Patient requiring end-of-life care Privacy and dignity issues Existing cohorts

Appendix B: Recommended prioritisation of single room / ensuite based on transmission risk

Priority	Communicable Disease	Precautions - In addition to standard precautions	Cohorting Guidelines / Comments. Discuss possibility with IPC of cohorting patients with the same confirmed organism with a dedicated bathroom.
Highest Priority for a NPIR / Single Room (and air purifier)	Viral Haemorrhagic fever	Contact, Airborne and Quarantine	Pre-arrange accommodation. NOT to wait in common area or with others. Negative Pressure Isolation Room (NPIR) with ensuite. Arrange transfer to appropriate facility asap. DO NOT COHORT
	Measles	Contact and Airborne	Pre-arrange accommodation. NOT to wait in common areas or with others. NPIR with ensuite preferred. Arrange transfer as appropriate asap.
	Chickenpox	Airborne	
	Pulmonary tuberculosis	Airborne	
	Disseminated HZV (shingles)	Contact and Airborne	DO NOT COHORT. For airborne organisms, if NPIR is not available, place patient in a single room with door closed and utilise an air purifier if available.
MERS/SARS/ COVID-19/ Pandemic influenza	Contact and Airborne	Pre-arrange accommodation where possible. DO NOT COHORT unless single rooms exhausted. ONLY COHORT confirmed patients. Discuss with IPC.	
Medium priority for a single room	CRE / CPE	Contact	DO NOT COHORT
	Meningococcal disease	Droplet	DO NOT COHORT – Isolate until completion of 24 hours of appropriate antibiotics
	Infectious diarrhoea	Contact and Droplet	Only cohort same diagnosed organism e.g. norovirus
	<i>C. difficile</i> -CDI	Contact	Higher priority should be given to high risk unit admissions, and persons with faecal incontinence /diarrhoea, immune-compromised states, discharging wounds that cannot be contained by dressings or indwelling devices. <ul style="list-style-type: none"> Shared bathrooms must be routinely cleaned and disinfected at least twice a day. Patients should be advised to inform nursing staff after each shower or if area visibly soiled, so a clean and disinfection of the bathroom can be arranged.
	Influenza	Contact and Droplet	
	Pertussis	Droplet	
	Respiratory syncytial virus	Droplet	
Mumps	Droplet		
Lowest priority for a single room	MRSA, VRE, ESBLs, MRGNBs	Contact	Prioritise single rooms in inpatient areas for babies <12 months. Higher priority should be given to high risk unit admissions, and persons with faecal incontinence /diarrhoea, immune-compromised states, discharging wounds that cannot be contained by dressings or indwelling devices.
	Shingles	Contact	
	Scabies	Contact	<ul style="list-style-type: none"> Shared bathrooms must be routinely cleaned and disinfected at least twice a day. Patients should be advised to inform nursing staff after each shower or if area visibly soiled, so a clean and disinfection of the bathroom can be arranged.
	Head Lice	Contact	
	Impetigo (school sores)	Contact	