





Antimicrobial Resistance and Healthcare Associated Infection

## **Version history**

Version	Date	Summary of changes
1.0	November 2023	Final

The review of the ARHAI Scotland Transmission Based Precautions (TBPs) literature review is currently ongoing and so the information may be subject to change.

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## **Section 1: Introduction**

This care home respiratory illness (RI) infection prevention and control (IPC) resource has been developed by ARHAI Scotland to provide care home staff with key IPC information to support the management of suspected and confirmed cases of respiratory illness of an infectious nature amongst residents. This resource should be used alongside the <a href="Care Home Infection Prevention and Control Manual (CH IPCM)">Care Home Infection Prevention and Control Manual (CH IPCM)</a>.

Respiratory illness can be caused by bacteria, viruses, and less common fungi. Symptoms, incubation periods and the period of infectivity may vary between pathogens and individuals.

Respiratory illness should be suspected in any resident with either a high temperature or sudden decline in mental or physical ability/functioning in combination with any new onset of respiratory symptoms, for example cough and/or sore throat. Residents should be clinically assessed by a GP or via existing processes to exclude any differential diagnosis.

Understanding incubation periods and periods of infectivity will support resident assessment, resident placement and enable the identification of residents who may have been exposed for ongoing symptom monitoring and early detection of new cases. Full details regarding pathogen specific symptoms, incubation periods and periods of infectivity are listed in the national **A-Z pathogens**.

## **Section 2: Season Preparation**

Infectious RI can occur at any time throughout the year although influenza is often a winter season virus. Staff should be continually aware and symptom vigilant for RI in the care home and the possibility of an outbreak.

Winter vaccinations such as flu and COVID-19 vaccines remain the best way to protect yourself and others. The vaccines offered each year provide very good protection against hospital admission and severe illness from both flu and COVID-19.

People with underlying health conditions may be at greater risk of illness from flu and COVID-19. Vaccinations are offered to those eligible and frontline health and social care workers to protect the workforce and health and social care services over the winter months. Information about the annual winter vaccination programme can be found on NHS Inform.

To support care home staff prepare, <u>winter preparedness IPC communication</u> <u>reminders</u> are issued in advance of the season by ARHAI Scotland and NHS Education for Scotland (NES).

These winter communication reminders should be communicated to all staff.

Care homes are advised to prepare for seasonal RI by reviewing and considering all the necessary actions in <a href="Appendix 1">Appendix 1</a> of this guidance to protect all staff and residents especially those who are at highest risk of becoming seriously ill.

# Section 3: Infection Prevention and Control (IPC)

Respiratory infections can be transmitted or spread in various ways; staff should be familiar with **infection transmission routes**.

The care home designated person in charge should ensure that IPC precautions are adopted and implemented by all staff via ongoing IPC compliance monitoring.

There should be processes in place for preadmission assessment of all infection risk prior to arrival (where possible) or carried out on arrival by asking all residents and accompanying persons the respiratory symptom screening questions.

## 3.1 Standard Infection Control Precautions (SICPs)

Infection Control Precautions (SICPs). When applied, these reduce the risk of transmission of infectious agents from known and unknown sources of infection. SICPs should be used by all staff, in all care settings, at all times, for all residents whether infection is known to be present or not to ensure the safety of residents, staff and visitors in the care home.

It is essential that SICPs are applied continuously as residents living in care homes are more vulnerable, therefore increasing their risk of acquiring infections which may then be serious and potentially life threatening. By continuously applying SICPs, you will provide a safe environment and effective care.

Before a resident is admitted to the care home it is important to risk assess for infection as part of resident's care plan, an IPC admission assessment should be undertaken by staff. Further information regarding admission **general respiratory screening questions** can be found within the resources section of the NIPCM.

If you suspect or are aware that a resident has an infection, then details should be confirmed for the correct IPC precautions to be put in place for the safety of the resident and others. Obtaining infection details may include appropriate clinical samples and/or screening to establish the causative organism which may be on advice from your local GP, Health Protection Team (HPT) and/or Infection Prevention and Control Team (IPCT) (depending on local processes).

If you suspect a resident has a RI you should:

- inform the person in charge immediately
- commence Transmission Based Precautions

- encourage and assist residents and those providing meaningful contact to practice good hand hygiene and respiratory hygiene
- continue to carry out hand hygiene as per <u>CH IPCM</u> at the <u>WHO 4 Moments</u>
  using hand rub unless they are visibly soiled, otherwise wash hands with
  soap and water
- use the appropriate personal protective equipment (PPE) when carrying out direct care as outlined in <u>Appendix 16</u>
- ensure timely collection of specimens for symptomatic residents which may include throat or perinasal swabs

For further information about SICPs see Chapter 1 of the CH IPCM.

## 3.2 Transmission based precautions (TBPs)

When caring for a resident who presents with symptoms of a respiratory illness, not in keeping with their normal respiratory function and therefore has a suspected or known RI illness, SICPs won't be enough to stop infection spreading and you will need to use some extra IPC precautions. These extra precautions are called <a href="https://example.com/Transmission-Based Precautions">Transmission Based Precautions</a> (TBPs).

Clinical judgement and decisions should be made by staff to determine the necessary IPC precautions required (the local HPT and/or IPCT (depending on local processes) should be contacted for advice and support where required).

Clinical judgement and decisions should be based on the:

- suspected or known infectious agent
- transmission route of the infectious agent
- care setting and procedures undertaken
- severity of the illness caused

Prompt application of TBPs is essential to prevent further spread and testing of symptomatic residents is required to confirm identification of the pathogen.

Symptomatic staff should refrain from duty.

Visitors should be supported with IPC and PPE requirements.

Further information regarding <u>TBPs</u> see <u>Appendix 11</u> and <u>Appendix 16 of the NIPCM</u>.

The local HPT or IPCT (depending on local processes) should be contacted for advice when required.

## 3.3 Hierarchy of Controls (HoC)

The <u>Hierarchy of Controls (HoC)</u> should be considered when applying SICPs and TBPs recognising that the most effective method of control (elimination) is employed first. This inherently results in safer control systems. It is recognised that elimination of risk may be challenging within health and care settings due to the nature of the services provided. Where that is not possible, all other controls must be considered in sequence. Personal protective equipment (PPE) is the **last** in the HoC and may be the only mitigating control when caring for a resident.

Further information on the HoC can found in the **CH IPCM** and **Appendix 17 of the NIPCM**.

## **Section 4: RI Outbreaks**

Definitions of infection outbreaks and incidents can be found in <a href="mailto:chapter3">chapter 3 of the</a>
<a href="MIPCM">NIPCM</a>. For staff cases, a community source should be considered and eliminated where possible.

Care homes for older adults are considered higher-risk settings for outbreak management purposes. As such, HPTs and/or IPCTs (depending on local processes) should be notified when a cluster of suspected or confirmed cases are identified.

#### This is due to:

- the population being older and likely to have more underlying health conditions. This puts them at greater risk of more severe illness
- opportunities for infections to spread quickly throughout the facility due to the communal nature of the setting

Further information can be found in <u>Section 3.2 of SHPN Management of public</u>

<u>health incidents</u> Guidance on the Roles and Responsibilities of an NHS led Incident

Management Team.

The local HPT and/or IPCT (depending on local processes) should be contacted for further advice or support where required.

Staff should refer to the agreed minimum <a href="NHS Alert organism/Condition list in Appendix 13 of the NIPCM">NHS Alert organism/Condition list in Appendix 13 of the NIPCM</a> for respiratory pathogens that require further investigation and reporting.

#### 4.1 Case definitions

Case definitions for assessment and reporting purposes will be defined by the supporting HPT/IPCT and/or the incident management team (IMT).

Examples are provided below:

- Confirmed case: Any resident or staff member who has or had respiratory symptoms of an infectious nature and has tested positive for a respiratory pathogen with epidemiological links to the care home
- Suspected case: Any resident or staff member with respiratory symptoms
  assessed as being of an infectious nature who has not yet been laboratory
  confirmed that has epidemiological links to the confirmed resident cases or
  staff

## 4.2 Actions to be taken in the event of a suspected or confirmed outbreak

The designated person in charge should ensure that:

- symptomatic residents are clinically assessed in line with local agreed processes
- ensure transmission based precautions are in place
- individual documented risk assessments are in place for all symptomatic
  residents who require to be isolated in their individual rooms. Risk
  assessments should consider individual resident health and wellbeing, their
  health and safety and their ability to remain in their rooms with the door
  closed. The minimum time for isolation in line with the <u>A-Z of pathogens</u> from
  resolution of symptoms should be supported and reviewed daily
- external receiving staff are notified if the resident being transferred has had a suspected or confirmed RI pathogen within the previous 48 hours
- symptomatic staff do not report for duty

The local HPT and/or IPCT (depending on local processes) should be contacted for further advice or support where required in relation to outbreak management. This may include testing for symptomatic residents to identify the causative organism that will inform individual placement if cohorting is required and direct any required treatment or any specialist advice.

The RI outbreak checklist in <u>Appendix 2</u> is a support resource which may be used to support compliance with IPC measures.

<u>Appendix 3</u> and <u>Appendix 4</u> should also be used to support assessment and record keeping.

## **Appendix 1: Seasonal IPC Checklist for RI**

	Actions to prepare	Υ	N	Date
1	Has this resource and associated winter IPC preparedness been communicated to all staff?			
2	Are all staff aware of and have access to the <a href="CH IPC">CH IPC</a> <a href="Manual?">Manual?</a>			
3	Have all staff completed appropriate IPC training relevant to their roles?			
4	Have all residents and staff been provided with <a href="Public Health Scotland">Public Health Scotland</a> information about the available seasonal vaccinations, including processes for vaccination booking information?			
5	Have all residents who are at highest risk of becoming seriously ill from respiratory pathogens been identified and assessed?			
6	Has PHS guidance for consent in care homes in Scotland been implemented and available in advance of vaccination schedules?			
7	Have resident seasonal vaccinations been scheduled and delivered as appropriate?			
8	Is PPE available in sufficient quantities and stored in a clean/dry area until required for use?			
9	Have all relevant staff been fit tested for respiratory protective equipment and trained to perform a fit check?			
10	Have hand washing posters as per the <a href="CH IPCM">CH IPCM</a> and <a href="WHO 4 moments posters">WHO 4 moments posters</a> been displayed in key areas throughout the care home?			
11	Is there liquid soap and disposable paper hand towels available in all public and communal toilets and in en-suite toilets?			
12	Are there sufficient quantities of hand rub and disposable tissues available in all public and communal areas and in resident's rooms?			
13	Are lidded foot operated waste bins in place and functioning throughout the facility?			
14	Are facilities in place for segregation of infectious laundry and water-soluble laundry bags readily available?			
15	Are there sufficient quantities of required cleaning materials available?			

#### ARHAI Scotland

	Actions to prepare	Υ	N	Date
16	Are there processes in place to support symptomatic resident risk assessments?			
17	Are ARHAI Scotland <u>Transmission Based Precautions</u> posters for droplet precautions displayed in key areas (throughout the care home for the duration of the outbreak)?			
18	Are Catch it, Bin it, Kill it' posters displayed in highly visible areas?			

## **Appendix 2: RI IPC Outbreak Checklist**



The IPC checklist should be completed as soon as an outbreak is suspected and continued daily until declared over.
State pathogen(s) and date the outbreak was identified:

## **Transmission Based Precautions for Outbreak Management**

SICPs should continue to be applied in all care settings, at all times, for all residents

Action	Date
Resident Placement/Assessment of risk	
Residents who are confirmed, suspected cases and those at increased risk of acquisition and adverse outcomes from HAI, for example immunosuppressed have been prioritised for single room accommodation with ensuite facilities	
Hierarchy of controls has been assessed and additional controls implemented where risk assessed and able to do so – window opening etc.	
Doors to isolation/cohort rooms/areas are closed and signage is clear. Resident risk assessments are documented in the resident notes for door closure in relation to resident safety, and health and well-being, minimum period specified and reviewed daily.	
Cohort areas are established if resident single rooms are unavailable and where there are multiple cases of the same infection. Residents should be separated by at least 6 feet (2 m) if cohorted.	
Contact tracing for exposed cases has been undertaken with symptom monitoring in place for early detection of new cases.	
Personal Protective Equipment (PPE): Gloves, disposable aprons, fluid resistant type 11 surgical mask (FRSM), eye protection (goggles or face visor) and respiratory protection (RPE)	

Action	Date	
Staff are wearing and applying <u>correct use</u> of PPE for direct care contact or when in the residents immediate care environment and PPE is changed between residents and/or following completion of a procedure or task – disposable apron, FRSM, eye protection. The use of gloves has been risk assessed.		
Staff are wearing and applying <u>correct use</u> of RPE as per the <u>CH IPCM</u> including the correct duration for post AGP fallow times - fluid repellent gown, fluid resistant FFP3 respirator, eye protection, and gloves.		
Staff are aware that where RPE (FFP3 masks) is required, they are to be doffed following exit from the care environment when the exposure risk has ended.		
Sufficient stocks of PPE including RPE are easily located and stored from risk of contamination.		
Symptomatic residents are encouraged to wear FRSMs where tolerated.		
Safe Management of Care Equipment		
Single-use items are in use.		
Dedicated reusable non-invasive care equipment is in use and decontaminated between use and prior to use on another resident using detergent followed by a disinfectant solution of 1000 parts per million available chlorine (ppm av cl) or a combined detergent/disinfectant solution at a dilution of 1,000 ppm av cl.		
Fans are not in use or risk assessments are in place in relation to clinical need.		
Safe Management of the care environment		
All areas are free from non-essential items for resident care and equipment, exposed food stuffs have been removed.		
At least daily cleaning and decontamination of the resident isolation room/cohort rooms/areas is in place using detergent followed by a disinfectant solution of 1000 ppm av cl or a combined detergent/disinfectant solution at a dilution of 1,000 ppm av cl. Discuss with local HPT/ICT if items are unable to withstand chlorine releasing agents.		
<b>Increased frequency</b> of decontamination is incorporated into the environmental decontamination schedules for areas where there may be higher environmental contamination rates, for example "frequently touched" surfaces such as door/toilet handles, bedside tables, over bed tables and bed rails.		

Action	Date			
<b>Terminal decontamination</b> is undertaken following resident transfer, discharge, or once the resident is no longer considered infectious.				
Information and Treatment				
Residents				
Residents are informed of all screening/investigation result(s) where appropriate and the next of kin informed where consent has been provided. (Documented in resident notes)				
Resident Information Leaflet has been provided and explained to next of kin where consent is in place. (Document in resident notes).				
Any appropriate antimicrobial/antiviral prophylaxis and treatment has been administered as prescribed.				
Symptomatic residents are supported to wear a FRSM where clinical safe and if tolerated.				
Staff		1	1	
Staff are kept informed of updates relating to the outbreak and necessary controls.  Staff considered at increased risk of acquisition (immunosuppression etc) have been risk assessed by Care Home Manager for resident care allocation.  No symptomatic staff are on duty and the A-Z pathogen exclusion guidance is followed.				
Visitors				
All visitors are aware of the current situation.				
IPC support and advice has been offered to those providing direct care to a resident. FRSM and eye protection has been offered.				
Visitors have been informed if they develop symptoms they should stay at home and follow advice by <a href="NHS inform.">NHS inform.</a>				
Provide relatives and those providing meaningful contact with the Washing Clothes at Home Leaflet				

Action	Date		
Staff support visitors with Scottish Government Care Home Visiting Policy			

(Refer to the <u>Care Home IPC Manual</u> for further information)

Total number of staff affected to date

## **Appendix 3: RI Outbreak Case Monitoring Record**



Residents:	Date					
Number of new probable residents today						
Total number of probable residents						
Number of new confirmed cases today						
Total number of new confirmed case today						
Total number of remaining symptomatic cases today						
Total number of residents giving cause for concern as a direct result of incident today						
Number of new residents who have died as a direct result of the respiratory pathogen and has been reported on any part of the death certificate						
Total number of resident deaths with respiratory pathogen reported on part 1 or 2 of the death certificate to date						
Staff:	Date:					
Number of new symptomatic staff today		Ì	Ì		<u> </u>	Ť

## **Appendix 4: RI Outbreak Case Review Monitoring Data Record**

Complete for all residents with symptoms. Specify Respiratory Pathogen:

Name of resident/staff member	СНІ	Vaccinated (Y/N)	Antibiotic (Y or N)	Antiviral (Y/N/NA)	Specimen date (X)	Specimen result (+ or -)	(Iden	Date of start and end of symptoms (Identify start and end date with a dot as below and link dates with a line)						
Example							19/9	20/9	21/9	22/9	23/9	24/9	25/9	
Joe Bloggs	011232 6214	N	N	N	20/9	+		X						
Jane Brown	071232 5321	Y	N	Y										