NHS National Services Scotland

Care Home Infection Prevention and Control (IPC) Resource for Gastro-intestinal illness

Version 2.0

7 October 2024

ARHAI Scotland

Antimicrobial Resistance and Healthcare Associated Infection

Version history

Version	Date	Summary of changes
1.0	30 November 2023	Final
2.0	7 October 2024	Removal of 2m guidance for cohort to align with NIPCM amendments Reference to revised Transmission Based Precautions Definitions Updated Appendices to align to NIPCM/CHIPCM amendments Link to new NIPCM winter preparedness webpage.

ARHAI Scotland are currently undertaking a Transmission-based Precautions (TBPs) definitions literature review and developing recommendations for practice. It is likely that 'droplet transmission' and 'airborne transmission' will be replaced with new definitions to describe respiratory transmission. This will mean changes throughout the CH IPCM to update the terminology including the addition of resources to support any guidance changes.

Use of this resource online is advised to ensure access to up-to-date advice. National IPC updates are communicated to stakeholders via the Care Home IPC Oversight and Advisory Group in addition to **the news section of the NIPCM**.

Contents

Section 1: Introduction

This care home gastro-intestinal illness 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 residents with gastro-intestinal (GI) illness of an infectious nature. This resource should be used alongside the **Care Home Infection Prevention and Control Manual (CH IPCM).**

Gastro-intestinal (GI) illness can be caused by bacteria, viruses, and less common parasites. Symptoms, incubation periods and the period of infectivity may vary between pathogens and individuals.

The most common pathogens of bacterial cause are ***Clostridioides difficile***, *Salmonella, Campylobacter.* In care homes, viruses such as Norovirus can spread in care settings due to the infectious nature of the virus especially when a resident is vomiting, as infectious particles are released into the environment. Norovirus as can survive outside the body for several days whilst *Clostridiodes difficile* spores can survive in the care environment for prolonged periods.

Infectious GI illness should be suspected in any individual with an acute onset of bloody or non-bloody watery diarrhoea categorised as Bristol Stool type 6 or 7 in **Appendix 1** and/or vomiting. Individuals 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, placement and enable the identification of possible exposed residents 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: Seasonal Preparation

Seasonal enteric GI illnesses such as Norovirus typically start in October although outbreaks can occur at any time throughout the year. Staff should be continually aware and symptom vigilant for GI illness in the care home and the possibility of an outbreak.

To support care home staff preparedness, **winter IPC communication reminders** 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. Refer to the **NIPCM winter preparedness page** for all relevant resources including supportive education and training for healthcare staff.

Care home staff are advised to prepare for seasonal GI illness by reviewing and considering all the necessary actions in **Appendix 2** 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)

Gastro-intestinal illnesses can be easily acquired and spread around the care home via indirect or direct contact from an infected individual when:

- in close contact with anyone who has diarrhoea and/or vomiting and via contaminated hands or if the correct use of personal protective equipment (PPE) is not applied
- touching contaminated surfaces or objects and not performing correct hand hygiene when required
- eating contaminated food (for example fruit left exposed or food contaminated by unwashed hands).

Note: Hand rubs should not be used when providing care to a resident with vomiting and/or diarrhoea. When caring for these residents, hand hygiene should always be performed using non antimicrobial liquid soap and water.

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

also be local processes in place for preadmission assessment of **all** infection risk prior to arrival (where possible) or carried out on arrival. It is important to understand if any new admissions or returning residents have any symptoms of infection. As a reminder, it is also important to undertake the **general respiratory screening questions** before a resident is admitted to the care home.

3.1 Standard Infection Control Precautions (SICPs)

The basic IPC measures that should be used in the care home are called **Standard 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.

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).

If you suspect a resident has a GI illness of infectious nature you should:

- inform the person in charge immediately
- ensure transmission-based precautions are applied
- encourage and assist residents and those providing meaningful contact to practice good hand hygiene

- use the appropriate personal protective equipment (PPE) when carrying out direct care as outlined in **Appendix 15** of the NIPCM
- ensure timely collection of specimens for symptomatic residents which may include faecal or vomit samples

Further information regarding SICPs see **Chapter 1 of the CH IPCM.**

3.2 Transmission-based Precautions (TBPs)

When caring for a resident who is vomiting and/or has diarrhoea not in keeping with their normal bowel function, and therefore has a suspected or known GI 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 **Transmission-based Precautions** (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 TBPs see **Appendix 11** and **Appendix 15** of the NIPCM.

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

3.3 The Hierarchy of Controls (HoC)

The **Hierarchy of Controls (HoC)** 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: GI Outbreaks

A GI outbreak should be considered in line with **Chapter 3 of the NIPCM** when 2 or more linked cases with the same infectious agent associated with the same healthcare setting over a specified time period or a higher-than-expected number of cases of HAI in a given healthcare area over a specified time period are identified.

This may include any resident or staff member with an acute onset of bloody or non-bloody watery diarrhoea categorised as Bristol Stool type 6 or 7 in **Appendix 1** and/or vomiting. For staff cases, a community source should be considered and eliminated where appropriate.

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 cases is 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 Section 3.2 of **SHPN Management of public health incidents. 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 **NHS Alert organism/Condition list in Appendix 13 of the NIPCM** for gastrointestinal 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 GI symptoms of an infectious nature with laboratory confirmation from a clinical specimen of loose stool or vomit with epidemiological links to the care home setting.
- **Suspected case:**.Any resident or staff member with 3 or more episodes of loose or liquid stools within a 24-hour period with an associated (or not) single episode (or more than) of unexplained vomiting awaiting laboratory confirmation of a GI pathogen with epidemiological links to any confirmed case.

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
- IPC 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 **A-Z of pathogens** from resolution of symptoms) should be supported and reviewed daily
- external receiving staff are notified if a resident being transferred has had a suspected or confirmed GI 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 GI outbreak checklist in **Appendix 3** is a support resource which may be used to support compliance with IPC measures.

Appendix 4 and **Appendix 5** should also be used to support assessment and record keeping.

Appendix 1: Bristol Stool Chart

Bristol Stool Chart

Type 1		Separate hard lumps, like nuts (hard to pass)
Type 2		Sausage-shaped but lumpy
Type 3		Like a sausage but with cracks on the surface
Type 4		Like a sausage or snake, smooth and soft
Type 5		Soft blobs with clear-cut edges
Type 6		Fluffy pieces with ragged edges, a mushy stool
Type 7		Watery, no solid pieces. **Entirely Liquid**

First published: Lewis SJ, Heaton KW (1997) Stool form scale as a useful guide to intestinal transit time. Scandinavian Jorunal of Gastroenterology 32: 920–4

Appendix 2: Seasonal IPC Checklist for GI illness

Number	Actions to prepare	Y	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 **CH IPCM?**			
3	Have all staff completed appropriate IPC training relevant to their roles?			
4	Is PPE available in sufficient quantities and stored in a clean/dry area until required for use?			
5	Is there liquid soap and disposable paper hand towels available in all public, communal toilets and en-suite toilets?			
6	Has **hand hygiene** education been reinforced to all staff in line with CH IPCM and **WHO 4 moments?**			
7	Have hand washing posters as per the CH IPCM and **WHO 4 moments posters** been displayed in key areas throughout the care home?			
8	Do all relevant staff have access to and awareness of the **Bristol Stool Chart** to support accurate assessment of stool types?			
9	Are lidded foot operated waste bins in place and functioning throughout the facility?			
10	Are facilities in place for segregation of infectious laundry and water-soluble laundry bags readily available?			
11	Are there sufficient quantities of required cleaning materials available?			
12	Are staff aware of who to contact to support symptomatic resident risk assessments?			
13	Are ARHAI Scotland Transmission Based Precautions **posters for contact precautions** displayed in key areas throughout the care home for the duration of the outbreak?			

Appendix 3: GI 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 high 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 isolation risk assessments are documented in the resident notes with regards to safety, and health and well-being, the minimum period should be specified and reviewed daily.					
Cohort areas are established if resident single rooms are unavailable and where there are multiple cases of the same infection.					
Contact tracing for exposed residents has been undertaken with symptom monitoring in place for early detection of new cases.					

Action	Date				
Personal Protective Equipment (PPE): gloves, disposable aprons, fluid resistant Type II surgical mask (FRSM)					
Staff are wearing and applying correct use 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, and the use of gloves has been risk assessed. A FRSM should be worn if the resident is vomiting.					
Sufficient stocks of PPE are easily located and stored from risk of contamination.					
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 1,000 ppm av.cl. or a combined detergent/disinfectant solution at a dilution of 1,000 ppm av.cl. Discuss with local HPT and or/IPCT if items are unable to withstand chlorine releasing agents.					
Increased frequency of cleaning is incorporated into environmental cleaning schedules for areas where there may be higher environmental contamination rates e.g., “frequently touched" surfaces such as door/toilet handles, bedside tables, over bed tables and bed rails.					

Action	Date				
Terminal cleaning 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 is informed where consent has been provided. (Documented in resident notes).					
Resident Information Leaflet has been provided for the resident (or explained) and to the next of kin where consent is in place. (Documented in resident notes).					
Any current antimicrobial/therapy and laxatives have been reviewed for the resident. (Documented in resident notes).					
Any appropriate antimicrobial treatment has been prescribed. (Documented in resident notes).					
Staff					
Staff are aware of the current situation and IPC controls, the need for hand hygiene using soap and water has been reinforced.					
No symptomatic staff are on duty.					
Visitors					
All visitors are aware of the current situation.					
Support has been offered to those providing direct care to a resident and a FRSM offered when the resident has been vomiting.					
Visitors have been informed if they develop symptoms they should stay at home and follow advice by **NHS inform.**					
Provide relatives and those providing meaningful contact with the **Washing Clothes at Home Leaflet** where required.					
Staff support visitors with **Scottish Government Care Homes Visiting Policy**					

(Refer to the Care Home Infection Prevention and Control Manual for further information)

Appendix 4: GI Outbreak Case Monitoring Record

Case assessments

Residents	Date						
Number of new probable cases today							
Total number of probable cases							
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 result of a GI illness today							
Number of new residents who have died as a result of a GI illness and the pathogen has been reported on any part of the resident's death certificate							
Total number of resident deaths reported on part 1 or 2 of the death certificate to date							

Staff	Date						
Number of new symptomatic staff today							
Total number of staff affected to date							

Appendix 5: GI Outbreak Case Review Monitoring Data Record

Complete for all residents with symptoms

Name of service/staff member	CHI	Antibiotic (Y or N)	Laxatives (Y or N)	Specimen date (X)	Specimen result (+ or -)	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	0509343124	N		20/9	+	●	X					