Rapid review of public health guidance on infection prevention and control measures for residential care facilities in the context of COVID-19

30 March 2020

Version history

Version	Date	Specific updates
V1.0	30/03/2020	Date of first rapid review

Background

In Ireland, there have been several reported outbreaks of COVID-19 in residential care facilities[1] (RCFs). The HPSC currently has preliminary guidance for RCFs in the context of COVID-19[2], though further measures to protect residents of RCFs may be introduced in this context. This document seeks to outline measures taken or advised by other organisations and governments to protect residents and staff of RCFs.

We undertook a rapid review of public health guidance on COVID-19 to summarise the range of advice and recommendations that have been issued to protect residents of RCFs. The focus is on measures that are over and above those outlined in the current HSPC guidance.

Methods

The review was first undertaken on March 30th, in line with the Protocol for the identification and review of new and updated relevant COVID-19 public health guidance, published by HIQA. A detailed account of the methods used in this review are provided in the protocol.

Results

Several countries and organisations have devised and implemented measures to protect residents of residential care facilities.

A number of protective measures have been undertaken in different health care settings to protect residents and staff of RCFs in the context of COVID-19. Table 1 provides an overview of the measures that are being undertaken across different health care systems. The specific measures that have been undertaken in each health care setting to protect residents and staff of RCFs as identified in this rapid review are summarised separately below according to organisation/country.

World Health Organisation

On 21st March, the WHO issued guidance[3] on infection prevention and control in long-term care facilities in the context of COVID-19. https://apps.who.int/iris/handle/10665/331508 The following is a detailed comparison of WHO guidance HPSC guidance:

Governance

The WHO advises having an infection prevention and control (IPC) focal point with responsibilities for leading and coordinating IPC activities. This focal point should be 'supported by an IPC team with delegated responsibilities and advised by a multidisciplinary committee'. Other responsibilities include (1) Be the point of contact if there is a suspected case; (2) Provide relevant COVID-19 training to all employees; (3) Provide COVID-19 information sessions for residents; (4) regularly audit IPC

practices; (5) Ensure hand/respiratory hygiene; (6) ensure annual influenza vaccination and pneumococcal conjugate vaccines to employees and staff.

The HPSC has no similar advice on governance.

Physical distancing

HPSC has some guidance on physical distancing but it is primarily in the context of dealing with a confirmed case of COVID-19 or a close contact of a confirmed case. It also specifies that group activities should be suspended (if possible) if a case is identified). The WHO guidance suggests enforcing a minimum of 1m distance between all residents and requiring residents and employees to avoid touching (e.g., shaking hands, hugging, or kissing). In order to ensure the 1m distance the WHO advises (1) staggering meals or serving residents their meals in their rooms and (2) 'For group activities ensure physical distancing, if not feasible cancel group activities'.

Visitors

HPSC guidance only provides one scenario (case identified in facility) in which visiting should be restricted to exceptional circumstances (end-of-life).

The WHO guidance states that 'In areas where COVID-19 transmission has been documented, access to visitors in the long term care facilities should be restricted and avoided as much as possible.'

Screening

There is no explicit guidance on screening staff or visitors in the HPSC guidance. The only reference for staff is that they should 'self-monitor'. For residents, the only guidance on screening occurs during transfer or admission, and screening for infection of patients with confirmed COVID-19. There is also guidance in the context of an outbreak that the facility should 'Institute active daily surveillance for fever or respiratory symptoms including cough in residents and staff for 14 days after the date of onset of symptoms of the last resident COVID-19 case'. This does not include a staff COVID-19 case.

WHO recommends that 'All visitors should be screened for signs and symptoms of acute respiratory infection or significant risk for COVID-19'.

The WHO advises that long term care facilities should 'Assess each resident twice daily for the development of a fever (≥38C), cough or shortness of breath.' This advice is not exclusive to there being an outbreak in the facility.

The WHO advises that staff should report and stay at home if they have 'fever or any respiratory illness.' It is also suggested that facilities should 'Undertake temperature check for all employees at facility entrance'.

Source Control

The HPSC provides similar guidance as the WHO on managing a suspected case. Although in the HSPC guidance, this is dispersed throughout the document as opposed to being provided as a single protocol.

Also, the WHO recommends 'that COVID-19 patients be cared for in a health facility, in particular patients with risk factors for severe disease which include, age over 60 and those with underlying comorbidities'.

The WHO also advises isolating the patient until they have two negative laboratory tests for COIVID-19 taken at least 24 hours apart after the resident's symptoms have resolved. Or, 'Where testing is not possible, the WHO recommends that confirmed patients remain isolated for an additional two weeks after symptoms resolve'.

The HPSC has conflicting advice: 'Residents [not clear if this is a close contact or confirmed case] are requested to avoid communal areas and stay in their room for their period of observation (until 14 days after exposure) and until Public Health advice confirms the resident can resume normal activity' and 'The resident [not clear if this is a close contact or confirmed case] should avoid communal areas for a minimum of 14 days after onset of illness and with five days free of fever'.

PPE

HPSC guidance is in line with WHO guidance on use of PPE. One exception is that the WHO advises placing a 'medical mask' on a residents who are suspected or confirmed cases and on others staying in the same room as the suspected/confirmed case.

Environmental cleaning and disinfection

HPSC guidance is not as specific as the WHO guidance albeit largely similar. In particular, the WHO advises that frequently touched surfaces are cleaned 'at least twice daily and when soiled', and the HPSC guidance is to clean 'frequently touched surfaces', 'more frequently' than daily.

Restriction of movement/ transport

The HPSC guidance is more restrictive on accepting confirmed cases of COVID-19, advising them not to be transferred until they have had 'two consecutive' negative tests. The WHO advises accepting residents if they are medically stable and the facility has the capacity to care for them and isolate them. HPSC guidance is similar to WHO guidance in terms of accessing care: only access care if essential. One difference is that the WHO guidance advises that suspected or confirmed COVID-19 patients should wear a mask during transport.

Mental health

The HPSC guidance for residential care facilities does not include guidance on maintaining the mental health of residents and employees. The WHO advise that residents and staff should be given updated information about COVID-19 regularly. Also, for staff, it is advised that their wellbeing should be regularly and supportively

monitored. The WHO advises that staff need 'rest and recuperation'. Resources are also provided by the WHO for [mental health and psychological support](#).

Public Health England (PHE)

The latest version of PHE guidance[4] was published on the 19th of March. There were few measures that were different to the HPSC guidance https://www.gov.uk/government/publications/covid-19-residential-care-supported-living-and-home-care-guidance/covid-19-guidance-on-residential-care-provision, these are:

- PHE advises that all visits from friends and family should cease.
- PHE advises that other personnel can still enter but handwashing procedures should be implemented.

Health Protection Scotland (HPS)

The latest version of the HPS' guidance[5] for 'residential settings' was published on the 26th of March. https://hpspubsrepo.blob.core.windows.net/hps-website/nss/2980/documents/1_covid-19-guidance-for-social-or-community-care-and-residential-settings.pdf. The following are the differences between HPSC guidance and HPS guidance:

- HPS have more restrictive policies for 'contractors' suggesting that their presence in facilities should be 'kept to a minimum'.
- HPS states that use of agency staff in the care of suspected or confirmed COVID-19 cases should be avoided. Also, HPS states that 'staff with underlying health conditions that put them at increased risk of severe illness from COVID-19, including those who are immunosuppressed' should not provide care to suspected or confirmed COVID-19 cases.

Public Health Agency (PHA) of Northern Ireland

On the 17th of March PHA published guidance[6] for RCFs. https://www.publichealth.hscni.net/sites/default/files/2020-03/GUIDANCE%20FOR%20RESIDENTIAL%20CARE%20PROVIDERS%20-%20COVID19.pdf There are very few measures in PHA guidance that are more restrictive than HPSC guidance.

- Similar to the HPSC, PHA advise that all non-urgent professional visits, or those which are not related to statutory requirements, should cease for the foreseeable future.
- PHA also recommend that any through-premises deliveries cease.
- One area that the HPSC has not considered is pastoral care. PHA recommend that RCFs give careful consideration to the frequency and nature of pastoral and chaplain visits – although an important part of residents' well-being, any

such visitors should be reminded of the need to minimise physical contact and to follow the advice on effective hygiene

Centers for Disease Control and Prevention (CDC) in the US

In the US, the Centre for Disease Control have outlined several measures in their latest guidance[7] (last updated on the 21st of March) to protect residents of RCFs. https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/prevent-spread-in-long-term-care-facilities.html

Governance

The CDC advises that health department should be 'notified about residents with severe respiratory infection, or a cluster (e.g., >3 residents or HCP with new-onset respiratory symptoms over 72 hours) of respiratory infections.' The CDC also advised to make a plan for managing staffing shortages.

Staff

CDC provides guidance to 'restrict nonessential healthcare personnel (including consultant personnel) and volunteers for entering the building'. The HPSC does not provide guidance on non-essential healthcare personnel and volunteers.

CDC guidance places emphasis on implementing and informing staff about non-punitive sick leave policies.

Visitors

CDC is currently recommending to restrict all visitation except for end of life.

Physical distancing

More restrictive than WHO on physical distancing – 'Cancel all group activities and communal dining'. CDC advises that if there are cases in the facility then encourage residents to remain in their room.

Screening

Similar to WHO guidance, the CDC recommends consistent screening of staff, specifically at the beginning of their shift, actively taking their temperature and documenting other symptoms. They also, recommend monitoring residents at least once a day for symptoms.

PPE

CDC advice for staff is similar though there are some differences. CDC suggest that healthcare workers showing symptoms should immediately put on a facemask and leave the facility. The CDC suggests implementing universal use of facemasks for HCP while in the facility even if there are no documented cases in the facility. Also suggests considering having health care workers wear all recommended PPE (gown, gloves, eye

protection, N95 respirator or, if not available, a facemask) for the care of all residents regardless of symptoms.

In relation to visitors, the CDC recommends that if there are any visitors they should wear a facemask. They also recommend that residents with an undiagnosed respiratory infection should wear a facemask if they leave their room. Also, if there are documented cases within a facility, then all residents (regardless of disease status) should wear a facemask if they leave their room.

Hygiene

Emphasis in the CDC guideline on educating residents and family on COVID-19, visitor and physical distancing restrictions, and hand/respiratory hygiene.

Ministry of Health New Zealand

A comparison of Ministry of Health New Zealand for Disability and Aged Care Providers[8] and HPSC guidance[2] for residential care facilities in the context of COVID-19. https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-novel-coronavirus-information-specific-audiences/covid-19-disability-and-aged-care-providers

The Ministry of Health New Zealand had similar guidance in place for Residential Care Facilities as the HPSC guidance. An update was published on 30 March 2020, measures included in this update that exceed the measures currently in Ireland are as follows:

Visitation

- All family visits except for families with residents receiving palliative care should stop. All allowed visits should be pre-arranged with staff.
- Non-urgent professional visits should stop. Essential health care associated visits, for example, chemotherapy, renal dialysis, vetted key support people for residents with dementia and volunteers to maintain essential services, are allowed but must be pre-arranged.
- External assessments for change in care level should be stopped. Team Managers, Case Managers or Registered Nurses should document changes and file for future recommendation.

Surveillance (other than relating to COVID-19)

- All surveillance and certification audits and mandatory training programmes should stop.

Isolation of suspected and known cases

- For residents, isolate on premises if admission to hospital is not required.
- For staff, isolate at home, or on premises if possible.

- If the above are not possible, contact regional public health to identify alternative quarantine options.

Australia (New South Wales Government)

A comparison of New South Wales COVID-19 (Coronavirus) – Guidance for residential aged care facilities[9] (last updated 27 March) and HPSC guidance[2] for residential care facilities in the context of COVID-19. https://www.health.nsw.gov.au/Infectious/diseases/Pages/coronavirus-racf-guidance.aspx

Visitation

The New South Wales guidance includes details on how visits should happen when they are allowed, as follows:

- Limit essential visits to a short duration
- Conduct essential visits in the resident's room, outdoors, or in a specific area designated by the residential care facility, rather than communal areas where the risk of transmission to other residents is greater.
- Measures such as phone or video calls should be made available to all residents to enable continuation of communication with family members.

HPSC guidelines on cocooning

On the 27th of March, the HPSC issued guidance on 'cocooning'.[10] There are aspects of this guidance that need to be incorporated into the HPSC's guidance for RCF's.[2]

The list of vulnerable groups in the cocooning document is different to the list in the guidance for residential care facilities. Cocooning advice recommends avoiding any gatherings. HPSC advice for RCFs does not consider this in terms of communal activities and meals. The cocooning document places more emphasis on people having essential care only, this is not focussed on in the HPSC RCF document.

Conclusion

A variety of protective measures are currently being taken to protect resident of RCF's. However, it is clear from the rapid review that there are other measures available. These include restricting visitors and non-essential staff, limiting or cancelling communal activities, and greater use of PPE in residents and staff.

The findings from this rapid review were accurate as of 30th March 18.00 GMT; however, it is important to note that the protective measures identified above may change as the situation and response to COVID-19 evolves.

Table 1

Country / setting	Protective measures

Australia (New South Wales Government)[9]	• Limit essential visits to a short duration
	• Conduct essential visits in the resident's room, outdoors, or in a specific area designated by the residential care facility, rather than communal areas where the risk of transmission to other residents is greater.
	• Measures such as phone or video calls should be made available to all residents to enable continuation of communication with family members
	• No new residents with COVID-19 compatible symptoms should be permitted to enter the facility.
	• Residents being admitted or re-admitted from other health facilities and communities should be actively screened for the symptoms of COVID-19.
	• Facilities must ensure that the following are available at the entrance of the facility and in each resident's room:
	  ○ adequate hand washing facilities and alcohol based hand rub
	  ○ tissues
	  ○ lined disposal receptacles (in comparison with "hands free waste bins" in HSPC guidance).
	  ○ Develop a plan for rapid notification for staff, families, carers, and your local public health unit

CDC, United States[7]	• Health department should be 'notified about residents with severe respiratory infection, or a cluster (e.g., >3 residents or HCP with new-onset respiratory symptoms over 72 hours) of respiratory infections.' • Make a plan for managing staffing shortage • Restrict nonessential healthcare personnel (including consultant personnel) and volunteers for entering the building' • Implement and inform staff about non-punitive sick leave policies. • Restrict all visitation except for end of life. • Cancel all group activities and communal dining • If there are cases in the facility then encourage residents to remain in their room. • Consistently screen of staff, specifically at the beginning of their shift, actively taking their temperature and documenting other symptoms • Monitor residents at least once a day for symptoms • Healthcare workers showing symptoms should immediately put on a facemask and leave the facility • Consider universal use of facemasks for HCP while in the facility even if there are no documented cases in the facility • Consider having HCW's wear all recommended PPE (gown, gloves, eye protection, N95 respirator or, if not available, a facemask) for the care of all residents regardless of symptoms. • If there are any visitors they should wear a facemask • Residents with an undiagnosed respiratory infection should wear a facemask if they leave their room

	• If there are documented cases then all residents (regardless of disease status) should wear a facemask if they leave their room • Educate residents and family on COVID-19, visitor and physical distancing restrictions, and hand/respiratory hygiene.
ECDC[11]	• Confirmed COVID-19 cases should be separated from other patients and ideally be transferred to a separate facility, regardless of the severity of the disease, until fully recovered
Germany (Robert Koch Institute)[12]	• Not yet reviewed
HPS[5]	• Contractors' presence in facilities should be 'kept to a minimum'. • Use of agency staff in the care of suspected or confirmed COVID-19 cases should be avoided • 'Staff with underlying health conditions that put them at increased risk of severe illness from COVID-19, including those who are immunosuppressed' should not provide care to suspected or confirmed COVID-19 cases.
New Zealand Ministry of Health[8]	• All family visits except for families with residents receiving palliative care should stop. All allowed visits should be pre-arranged with staff. • Non-urgent professional visits should stop. Essential health care associated visits, for example, chemo, renal dialysis, vetted key support people for residents with dementia and volunteers to maintain essential services, are allowed but must be pre-arranged. • External assessments for change in care level should be stopped. Team Managers, Case Managers or Registered Nurses should document changes and file for future recommendation. • All surveillance and certification audits and mandatory training programmes should stop • For residents, isolate on premises if admission to hospital is not required. • For staff, isolate at home, or on premises if possible. • If the above are not possible, contact regional public health to identify alternative quarantine options.
PHA[6]	• All non-urgent professional visits, or those which are not related to statutory requirements, should cease for the foreseeable future • Ensure that any through-premises deliveries cease • Give careful consideration to the frequency and nature of pastoral and chaplain visits – although an important part of residents' well-being, any such visitors should be reminded of the need to minimise physical contact and to follow the advice on effective hygiene
PHE[4]	• All visits from friends and family should cease • Other personnel can still enter but handwashing procedures should be implemented. • People who smoke also have a possible higher risk of serious illness from COVID-19-infection.
WHO[3]	• WHO advises having an infection prevention and control focal point with responsibilities for leading and coordinating IPC activities

	• Enforce a minimum of 1m distance between all residents and require residents and employees to avoid touching (e.g., shaking hands, hugging, or kissing). • To ensure the 1m distance the WHO advises ➢ staggering meals or serving residents their meals in their rooms and ➢ 'For group activities ensure physical distancing, if not feasible cancel group activities'. • 'In areas where COVID-19 transmission has been documented, access to visitors in the LTCFs should be restricted and avoided as much as possible.' • All visitors should be screened for signs and symptoms of acute respiratory infection or significant risk for COVID-19'. • LTCF's should 'Assess each resident twice daily for the development of a fever (≥38C), cough or shortness of breath.' This advice is not exclusive to their being an outbreak in the facility. • Staff should report and stay at home if they have 'fever or any respiratory illness'. • Facilities should 'Undertake temperature check for all employees at facility entrance.' • Place a 'medical mask' on resident who are suspected or confirmed cases and on others staying in the same room as the suspected/confirmed case. • COVID-19 patients should be cared for in a health facility, in particular patients with risk factors for severe disease which include age over 60 and those with underlying comorbidities' • isolate the patient until they have two negative laboratory tests for COIVID-19 taken at least 24 hours apart after the resident's symptoms have resolved. Or, 'Where testing is not possible, WHO recommends that confirmed patients remain isolated for an additional two weeks after symptoms resolve.' • WHO advises that staff need 'rest and recuperation'

Abbreviations: CDC – Centers for Disease Control and Prevention; HPS – Health Protection Scotland; PHA – Public Health Agency of Northern Ireland; PHE – Public Health England; WHO – World Health Organisation

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