Prevention and Management of COVID-19 in Community residential and in-patient facilities 3rd April 2020

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This is the first of a series of webinars the national AMRIC Team intend to deliver

Today we are covering the key elements of COVID-19 and include responses to queries you have.

IPC guidance has been changing as COVID-19 pandemic continued to present in Ireland. For full guidance updates go to www.hpsc.ie

Please use the chat box on left side of the screen to type in your queries/comments and we will endeavour to respond during this webinar.
First Things First

**Standard Precautions** (especially hand hygiene)
with all patients
in all settings
all the time

Contact and Droplet Precautions with all patients with clinical features of viral respiratory tract infection
Key Elements of Standard Precautions In This Context

Hand hygiene (five moments & good technique)

Respiratory hygiene and cough etiquette

Environmental /equipment cleaning & appropriate disinfection

Use of task appropriate PPE in contact with blood and body fluids (other than sweat)

Safe disposal of waste and laundry

Safe injection practices
The disease is COVID-19

The virus is SARS-CoV-2
Some General Points

SARS-CoV-2 is a respiratory virus

It is many respects similar to many other respiratory virus

Lipid coat with protein spikes

Virus is dispersed in fluids from the respiratory tract of an infected person

Infection is by attachment of protein spikes to the mucosa of the respiratory tract
Some General Points

The lipid coat matters

Alcohol hand rub, soap and detergent can break up the lipid coat
Common Questions and Concerns

Should we treat every resident as if they have COVID-19?

No

Residents with no clinical features to suggest COVID-19

Standard Precautions all patients at all times
(Standard Precautions is not doing nothing)
Common Questions and Concerns

Are there infected patients/residents with no symptoms?

Yes

JD gets infected on Friday 13 March

Probably most likely to get symptoms around Friday 20 March

Might not get symptoms until Friday 27 March
Common Questions and Concerns

Do infected residents with no symptoms shed the virus?

Virus has been detected in some who have no symptoms

Does infection spread from infected residents with no symptoms?

Evidence has been reviewed
The evidence is unclear

Spread is from symptomatic contacts and is the driver of the pandemic and the greatest risk
Does infection spread from infected residents with no symptoms? It would be surprising if spread from asymptomatic patients to close contacts does not happen sometimes in the late incubation period and in the absence of Standard Precautions.

Standard Precautions all patients all the time
FAQ: Should we test everyone especially if multiple residents have symptoms?

The test detects virus RNA in respiratory secretions.
The main sample used is a swab from the pharynx and nasopharynx.
Lower respiratory tract samples are useful in some patients.

Two parts to remember:
1) How good is the lab test at finding virus in the sample?
2) How good is the sample?
Common Questions and Concerns

Repeat testing of residents who were positive

Not required for residents who have reached the end of their 14 days isolation and have no fever or cough for the final 5/14 days in isolation
FAQ:
Transferring residents to and from acute hospitals. Should they first be swabbed?

Asymptomatic and no known exposure – no need to swab

Asymptomatic contacts of positive cases: no need to swab, may transfer, isolate in single room and monitor for symptoms over 14 days. Swab if respiratory symptoms develop

Symptomatic cases – isolate, swab and await result

Communication and co-operation between facilities is important
How does cocooning apply to residents in RCFs?

• Remain in own room where practically possible

• Social distancing in communal areas where necessary

• Cessation of visiting by family other than exceptional circumstances such as end of life or exceptional situations

• Cessation of group and non essential activities and volunteer services other than pastoral care (last rites)
Detection of COVID-19
What we need to identify quickly in our facility

Are staff monitoring residents for respiratory symptoms of and reporting to person in charge?:

Typical features: fever, dry cough and shortness of breath
Remember not everyone has typical features and staff know their residents so important to report any change in their condition
Healthcare workers who are symptomatic or close contacts of positive patients

Staff need to know to report symptoms and symptoms of fever, cough, shortness of breath (or other respiratory illness symptoms) to their service immediately

Remember presenteeism can be as harmful as absenteeism

HCWs should remain off duty and self isolate for 14 days if symptomatic and liaise with line manager/Occupational Health for advice before returning

If a staff member is a close contact the facility will assess whether to self isolate or if derogation to work applies if asymptomatic monitoring

Occupational health guidelines available on www.hpsc.ie
Get the basics right to prepare for dealing with COVID-19

1. HCWs need to be familiar with types of PPE they will need
2. HCWs should be trained on hand hygiene and how to put on and remove PPE
3. PPE should only be used when needed

Guidance on HPSC website @ www.hpsc.ie
### Some relevant examples for RCFs of PPE guidance updated for hpsc.ie

**Patients with respiratory symptoms/suspected/confirmed COVID-19** where the tasks being performed are unlikely to provide opportunities for the transfer of virus/other pathogens to the hands and clothing. Low contact activities for example:

- Initial clinical assessments
- Taking a respiratory swab
- Recording temperature
- Checking urinary drainage bag
- Inserting a peripheral IV cannula
- Administering IV fluids
- Helping to feed a patient

**Hand hygiene**

- Disposable single use nitrile gloves
- Disposable plastic apron
- Surgical facemask
- Eye protection*

*Eye protection is required to be worn as part of standard infection control precautions when there is a risk of blood, body fluids, excretions or secretions splashing into the eyes.

Individual risk assessment must be carried out before providing care. This assessment will need to include:

- Whether patients with possible COVID-19 are coughing.
- The task you are about to perform.
Patients with respiratory symptoms/suspected/confirmed COVID-19 who do not require an aerosol generating procedure but **do require high contact patient care activities that provide increased risk for transfer of virus and other pathogens to the hands and clothing** of healthcare workers including (but not limited to);

- Close contact for physical examination/physiotherapy
- Changing incontinence wear
- Assisting with toileting
- Device care or use
- Wound care
- Providing personal hygiene
- Bathing/showering
- Transferring a patient
- Care activities where splashes/sprays are anticipated

- Hand hygiene
- Disposable single use nitrile gloves
- Long sleeved disposable gown
- Surgical facemask
- Eye protection*

*Eye protection is recommended as part of standard infection control precautions when there is a risk of blood, body fluids, excretions or secretions splashing into the eyes.

Individual risk assessment must be carried out before providing care. This assessment will need to include

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<table>
<thead>
<tr>
<th>Cleaning</th>
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<tbody>
<tr>
<td>Cleaning where patient is present</td>
<td>• Hand hygiene</td>
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<td>• Disposable plastic apron</td>
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<td>• Surgical facemask</td>
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<td>• Household or disposable single use nitrile gloves</td>
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<tr>
<td>Cleaning when patient is not present. For example, after the patient has been discharged or the procedure is complete. Ensure adequate time has been left before cleaning, as per guidelines.</td>
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The Updated IPC Guidance (@www.hpsc.ie)

Putting on PPE
If you make a mistake fix it – this is safe but it is the correct putting on that is essential to safe taking it off

(Clean hands)
Gown/apron
(hooded suits are new for us)
Mask
Goggles
Gloves
Enter

Useful if possible to have someone to check you did it right
No unnecessary items, no questions - you are doing this one thing
IPC Guidance (@www.hpsc.ie)

Taking off PPE
You are doing this one thing
If you make a mistake at any stage don’t panic, clean your hands
Gloves
(Hands)
Goggles
Gown/apron
(Exit)
Mask
(Hands)

Useful to have someone to check you did it right
Common Questions and Concerns

Should we be wearing a facemask all the time at work?

There is no evidence of benefit.

There is abundant experience that it leads to poor practice (mask fidget, masks pulled up and down).

We need to continue to differentiate levels of risk so that people are conscious of when they are really in a high risk situation.
Common Questions and Concerns

What differs between droplet and aerosol spread?

Liquid drops from the respiratory tract come in a full range of sizes. Bigger ones fall out of the air quickly (the bigger they are, the faster they fall). Smaller ones can travel on air currents and can fill the room.
Common Questions and Concerns

What do we mean about Droplets and Aerosol Transmission

**Droplet transmission** – experience and evidence is that the infection is overwhelmingly transmitted over short distances (influenza, COVID-19, meningococcal meningitis)

**Airborne transmission** – experience and evidence is that infection is transmitted over longer distances (measles, chickenpox and tuberculosis)
For Aerosol Generating Procedures (AGPs) airborne precautions are required for otherwise droplet transmitted infections

AGP’s should be carried out in a single room of a positive suspected COVID-19 resident using airborne precautions. A respirator mask should be worn (FFP2/FFP3)

AGPs are associated with increased risk of transmission of respiratory virus
There are differences of opinions and limited evidence on some types of AGPS

List of AGPs are continually updated on website the HPSC assessment of what constitute AGPs associated with increased risk of transmission of respiratory virus

Nebuliser therapy not considered an AGP in Irish Guidance
Examples of AGPS (updated table will be on HPSC website shortly)

<table>
<thead>
<tr>
<th>Induction of Sputum</th>
<th>Consistently recognised</th>
<th>Hand Hygiene</th>
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<td></td>
<td>FFP2 RESPIRATOR MASK</td>
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<td>Long Sleeved Gown</td>
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<tr>
<td>High Flow Nasal Oxygen (HFNO) including AIRVO</td>
<td>Accepted by many</td>
<td>Hand Hygiene</td>
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<tr>
<td></td>
<td></td>
<td>FFP2 RESPIRATOR MASK</td>
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<td>Long Sleeved Gown</td>
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<tr>
<td>Non-invasive ventilation – CPAP/BiPAP</td>
<td>Accepted by many</td>
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<td>FFP2 RESPIRATOR MASK</td>
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<td>Long Sleeved Gown</td>
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<tr>
<td>Activity</td>
<td>Not supported by evidence or plausible hypothesis and not recognised by most national bodies.</td>
<td>PPE Requirements</td>
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<tr>
<td>Delivery of nebulised medications via simple face mask</td>
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<td>Hand Hygiene</td>
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<td>Surgical Face Mask</td>
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<td>Gown OR Plastic Apron*</td>
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<td>Risk Assessment Re: Eye Protection</td>
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<tr>
<td>Closed suction systems (CSS) enable patients to be suctioned by a suction catheter enclosed within a plastic sleeve, without the need for ventilator disconnection</td>
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<td>Hand Hygiene</td>
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<td>Surgical Face Mask</td>
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*Refer to National Guidelines on PPE @www.hpsc.ie*
### Not considered to be aerosol generating procedures- updated in guidelines

| Chest physiotherapy in absence of other AGP’s | Not supported by evidence or plausible hypothesis and not recognised by most national agencies. | Hand Hygiene  
Surgical Face Mask  
Gloves  
Gown OR Plastic Apron*  
Risk Assessment Re: Eye Protection |
|---|---|---|
| Clinical dysphagia examinations- this examination includes orofacial assessment and administration of food and/or fluids to evaluate swallowing ability | Not supported by evidence or plausible hypothesis and not recognised by most national agencies. | Hand Hygiene  
Surgical Face Mask  
Gloves  
Gown OR Plastic Apron*  
Risk Assessment Re: Eye Protection |

*Refer to National Guidelines on [PPE@www.hpsc.ie](http://www.hpsc.ie)*
Patient management options:

Confirmed positive patients
Suspected residents

Isolation in single room with dedicate toilet and bathing facilities

Cohorting of COVID positive residents is the second option
Cohorting

Suspected residents should not be cohorted with confirmed positive residents if possible.

A designated cohort area should be separated from non-cohort areas by closed doors.

- Staff caring for residents in cohort area for positive COVID residents should not provide care to other residents and limit travel through cohort area.

- Signage should be well placed to prompt restricted entry to other staff.

- Where possible use disposable patient equipment items and keep dedicated equipment in cohort area. Clean and disinfect equipment before moving from cohort area.
Key queries asked by RCFs on cleaning frequencies and methods

All environmental surfaces should be thoroughly cleaned daily using disposable cloths and a neutral detergent in a solution of warm water. It is prudent to clean close touch surfaces including door handles, phones etc. cleaned at least twice daily at the moment.

Twice daily clean of isolation rooms/ cohort areas with a combined detergent/disinfectant solution at a dilution of 1,000 parts per million available chlorine (ppm available chlorine (av.cl.)); or a general purpose neutral detergent, followed by a disinfectant solution of 1,000 ppm.

Minimise hoovering carpet floors in isolation rooms until patient comes out of isolation and terminal clean may include steam clean of fabrics/carpets.
Important COVID-19 Guidance for RCFs

Preliminary Coronavirus Disease (COVID-19) Infection Prevention and Control Guidance include Outbreak Control in Residential Care Facilities (RCF) and Similar Units available at the following HPSC link

Guidance on the transfer of hospitalised patients from an acute hospital to a residential care facility in the context of the global COVID-19 epidemic

https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/infectionpreventionandcontrolguidance/residentialcarefacilities/Guidance%20on%20the%20Transfer%20of%20Hospitalised%20Patients%20March%202020.pdf
Current recommendations for the use of Personal Protective Equipment (PPE) in the management of suspected or confirmed COVID-19.

(Copy and past the attached link into your web browser)

Safe and appropriate use of PPE is essential for all healthcare workers. You are encouraged to complete the HSE-land module on Putting on and Taking Off PPE in the Community Healthcare Setting by logging onto HSE-land on the following link:

https://www.hseland.ie/dash/Account/Login

It only takes about 10 minutes to complete and there is certification following self-assessment.
Stay safe, stay apart and remember to clean your hands

Thank you for all your efforts during this time

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