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Health Service Executive

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By Email Only

Re: Guidance to Support Prioritisation of the use of Personal Protective Equipment (PPE)

Dear Colleagues

Our response to COVID-19 has involved significant public healthcare actions which have been implemented across the organisation and now in wider society. As part of our preparedness planning, we have been working collectively with the Department of Health to identify actions which will be taken as the outbreak progresses to delay and mitigation phases.

Supporting and protecting our healthcare workers and their welfare is a priority of this response. Access and provision to essential medicines, personal protective equipment and medical equipment is a critical part of our plan.

To ensure the sustainability of essential products, specifically PPE, we have developed guidance to support staff in the prioritisation of same. The guidance which is available in Appendix 1 provides information on the availability of PPE and the use of same to minimise risk of transmission of infection.

Please ensure that the attached guidance is brought to the attention of all healthcare workers and is implemented to avoid depleting limited supplies of PPE through inappropriate use.

May I take this opportunity to acknowledge all the dedication and professionalism of our tremendous staff in these challenging times and assure you of our on-going commitment and support as our response to the outbreak evolves.

Yours sincerely

Dr Colm Henry
Chief Clinical Officer



Appendix 1

Re: Essential Action to Sustain Access to Personal Protective Equipment

The HSE is committed to:

- Providing all staff with up to date best practice guidance on infection prevention control including the appropriate use of PPE, as advised by the HPSC and taking account of the advice of WHO and other authorised agencies.
- Providing the appropriate and recommended personal protective equipment to front line healthcare workers (HCW).
- Ensuring that all necessary advice, training and equipment are available to allow HCW protect themselves from risk of infection while delivering patient care in these challenging times.

We know from research that the risk is significant but can be minimised by:

- Avoidance of unnecessary contact with infectious patients.
- Performance of hand hygiene by the correct method and according to the five moments of hand hygiene.
- Encouraging patients to follow respiratory hygiene and cough etiquette.

Fatigue and conflicting demands leading to omissions in best practice are likely to be amongst the greatest factors contributing to risk of infection for healthcare workers. Therefore, it is very important that staff are supported as much as possible to take breaks and to concentrate on the single task of caring for a high-risk patient when they are assigned that role. This will require a supplementation of rosters in these environments.

Availability of PPE

To protect staff and patients appropriate use of Personal Protective Equipment (PPE) is an additional important element of good infection prevention and control practice. Because of the nature of the current public health emergency of international concern the global demand for critical items of PPE is unprecedented. In these circumstances we need to focus the use of those supplies that the HSE can secure on those situations where the risk is greatest and where use of PPE is absolutely required.

Transmission of Virus

Like other respiratory viruses, the virus that causes COVID-19 is transmitted if the virus reaches the mucosa of the respiratory tract or eyes. The main way it reaches the respiratory tract is when contaminated hands or gloves touch the eyes nose or mouth (**Contact**). The virus can also reach the respiratory tract if an infected patient coughs or sneezes when a person with infection is close to another person and the spray (**Droplets**) from the cough or sneeze lands in the eye, nose or mouth. There is also a risk of airborne transmission in situations where specific procedures likely to generate infectious aerosols (Aerosol Generating Procedures) are performed. A list of Aerosol Generating Procedures (AGP) as agreed by the COVID-19 Expert Advisory Group is included below. Of note intubation and



suctioning are AGPS associated with **an increased risk of infection** and administration of nebulised medication is not included.

Use of PPE to reduce risk of transmission of with respiratory tract viruses and bacteria

When delivering care to a patient with a droplet transmitted respiratory tract infection, including COVID-19:

- All staff members within 1 m of the patient should adhere scrupulously to all elements of best IPC practice including use of appropriate PPE (gown, surgical mask, eye protection and gloves). When performing an AGP associated with an increased risk of infection on an patient with a droplet transmitted respiratory tract infection, including COVID-19, **or while in a room where a colleague is performing an AGP** on any patient with a respiratory tract infection, healthcare workers should adhere scrupulously to all elements of best practice including the use of appropriate PPE (gown, respirator mask (FFP2), eye protection and gloves).
- The highest risk AGP appears to be endotracheal intubation and the operator is at greatest risk as in direct proximity to the patient.

Situation in which more limited PPE or no PPE is required

In order to ensure that PPE continues to be available for those at high risk it is important that the PPE use is appropriate to the risk associated with the situation. In some situations very limited PPE is appropriate and in some situations no PPE is required.

The following are examples of situations related to the care of COVID-19 patients in which use of limited PPE is appropriate:

- It often arises that a HCW is providing care to a patient with COVID-19 or other droplet transmitted respiratory tract infection and is being supported by a colleague (support provider). The support provider may be involved in transfer of certain materials (samples) or small items of equipment (glucometers) to and from the care provider. If the support provider can maintain a distance of 1 metre^{Note} from the patient's mouth and nose they are not within the likely range of droplet transmission. In that setting, **provided the care provider is not engaged in an AGP**, it is adequate for support provider to wear a disposable apron and gloves and to perform hand hygiene when they remove the gloves and apron.
- When meals are delivered to COVID-19 confirmed or suspect patients who are clinically stable and able to cooperate it may be possible to contact the patient by telephone and ask them to move the bed table near the door of the room and then to return to the bed space. In that situation the person delivering the meal tray is not within the likely range of droplet transmission and in that setting it is adequate for them to wear a disposable apron and gloves and to perform hand hygiene when they remove the gloves and apron.
- Staff members who must enter a vacated room that was occupied by a COVID-19 confirmed or suspected patient are at very low risk of droplet exposure as there is no



patient there to generate fresh droplets. This applies to staff **who are cleaning the room or performing other tasks related to preparing the room for re-use**. In that setting it is adequate for them to wear a disposable apron and gloves and to perform hand hygiene when they remove the gloves and apron.

- Staff members who are engaged with cleaning or reprocessing of equipment used in the care of a COVID-19 patient or who handle laundry from a COVID-19 patient, are **not likely** to be exposed to droplets and therefore it is adequate for them to wear a disposable apron and gloves and to perform hand hygiene when they remove the gloves and apron.
- Staff members who are briefly in the vicinity of a COVID-19 patient (for example standing in the corridor as the patient goes by) or observing from a distance but who are not contributing to the care of the patient do not need to wear any PPE.

Avoiding inappropriate use of PPE

Many of us are naturally fearful in the context of this new virus that has resulted in infection of healthcare workers in many countries including in Ireland. Wearing additional PPE helps some staff to feel more secure but the PPE only has real value in specific risk situations as outlined.

We must avoid depleting limited supplies of PPE through inappropriate use.

Note. 1m is the generally accepted distance necessary to avoid exposure to droplets. In assessment of exposure public health doctors may use a distance of 2m to add a margin for uncertainty. If the circumstances permit the support provider to remain more than 1 m away or remain outside the door and open the door only when required they should do so.

Note 2. Aerosol Generating Procedures Associated with and Increased Risk of Infection are available on www.hpsc.ie.

Aerosol Generating Procedures include:

- Intubation
- Extubation
- Manual ventilation
- Open airway suctioning- performed with the disconnection of the patient from the ventilator and the introduction of the suction catheter into the endotracheal tube
- Non-invasive ventilation (e.g., BiPAP, CPAP)
- Tracheostomy formation and associated procedures including tracheostomy suctioning
- Bronchoscopy
- Surgery and post mortem procedures involving high speed devices
- Certain dental procedures (e.g. High-speed drilling)
- High frequency Oscillatory Ventilation



- Induction of sputum - administering nebulised saline to moisten and loosen respiratory secretions (may be accompanied by chest physiotherapy) to induce forceful coughing
- Cardio pulmonary resuscitation

Only the minimum number of required staff should be present, and they must all wear PPE as described. Entry and exit from the room should be minimized during the procedure.

- **Nebulisation**
The available evidence indicates that administration of nebulised medication is not associated with an increased risk of transmission of infectious respiratory aerosols or droplets. During nebulisation, the aerosols produced are derived from the medicinal fluid in the nebuliser chamber and not from the patient. Additional precautions are therefore not required when administering nebulisation. Cleaning hands after touching the patient or handling the nebuliser or oxygen therapy is sufficient.
- **Chest physiotherapy**
Chest physiotherapy is not considered to generate aerosols when carried out independently from any of the procedures listed above. Chest physiotherapy is found to increase droplet production and these particles are predominantly >10µm in size and precipitate within 1m of the patient.

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