20 May 2020

Dear Colleagues,

Position Statement on Guidance for Personal Protective Equipment (PPE) and Aerosol Generating Procedures (AGP)

Further to our letter of 2 April on the UK PPE guidance, this letter provides further clarification on the PPE and AGP guidance.

In Scotland, guidance produced by Health Protection Scotland (HPS), Public Health England (PHE) and the Scottish Government Health and Social Care Directorate (SGHSCD) has national standing.

Royal Colleges and other professional organisations producing supplementary infection and prevention control guidance are encouraged to use the HPS guidance as a single source of reference when producing clinical guidance. This guidance can be accessed via the relevant COVID-19 pages on the HPS website: https://www.hps.scot.nhs.uk/a-to-z-of-topics/covid-19/.

New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG) Rapid Review

NERVTAG has recently undertaken an evidence review to consider whether chest compressions and defibrillation are associated with an increased risk of transmission of acute respiratory infections. NERVTAG was also asked to give an opinion on whether chest compressions and defibrillation should be considered to be AGPs.

Having reviewed the available evidence, NERVTAG concluded that it does not consider that the evidence supports chest compressions or defibrillation being procedures that are associated with a significantly increased risk of transmission of acute respiratory infections.

NERVTAG also states that whilst it is biologically plausible that chest compressions could generate an aerosol, this is only in the same way that an exhalation breath would do. An expiration breath, much like a cough, is not currently recognised as a high-risk event or an AGP. In addition, NERVTAG states that defibrillation is not likely to cause any significant breath exhalation. Based on this evidence review and NERVTAG’s findings, UK IPC guidance will not add chest compressions or defibrillation to the list of AGPs.

However, we are in unprecedented times and it is paramount that frontline healthcare professionals are supported to find a pragmatic solution to ensure their safety and that of their patients. NERVTAG recognises that the evidence-base is extremely weak and heavily confounded by an inability to separate out the specific procedures performed as part of CPR, i.e. chest compressions, defibrillation, manual ventilation and intubation (airway management).
Therefore, CPR within a hospital setting should be considered as a continuum which is likely to include an AGP as part of airway management. In this case, the precautionary principle should apply and the healthcare professional should be supported by their organisation to make a professional judgement about whether to apply airborne precautions; which would include FFP3 face mask, long-sleeved gown, gloves and eye/face protection. NHS Boards must ensure that this PPE is available for these frontline staff.

Scottish Ambulance Service – similarly to hospitals, within this setting, there is also a likely outcome of advanced airway management as part of the CPR continuum. Therefore the paramedic should make a professional judgement about whether to apply airborne precautions based on the likely outcome of CPR; this would include FFP3 face mask, long-sleeved gown, gloves and eye protection.

First responders (not in a hospital setting – see definition in the COVID-19: guidance for first responders) – where chest compressions and early defibrillation are the likely outcome (rather than advanced airway management which would be undertaken by a paramedic or other trained clinician), a fluid resistant surgical facemask, disposal apron, gloves and eye protection should be worn where appropriate, in line with Table 4 of the UK PPE guidance.

Out of Hospital Cardiac Arrest – where chest compressions and early defibrillation are the likely outcome (rather than advanced airway management which would be undertaken by a paramedic or other trained clinician), a fluid resistant surgical facemask, disposal apron, gloves and eye protection should be worn where appropriate, in line with Table 4 of the UK PPE guidance. Where PPE is not available, the Resusitation Council UK (RCUK) has provided advice for this below:

“If there is a perceived risk of infection, rescuers should place a cloth/towel over the victim’s mouth and nose and attempt compression only CPR and early defibrillation until the ambulance (or advanced care team) arrive.”

We trust this information is helpful. On behalf of the Scottish Government, we would like to take this opportunity to thank all Health and Social Care staff and support services in Scotland and reiterate the appreciation for the continuous important and vital national services you are all providing daily, during the COVID-19 Pandemic.

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