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COVID-19 and Emergency First Response (EFR) care.

Emergency First Responders (EFRs) are tasked to normal everyday emergency incidents i.e. Firefighters. Some industries, due to the risk profile, may utilise EFRs as part of a response team. Alternatively other industries train responders beyond that of FAR and privilege them to perform specific clinical interventions i.e. oxygen therapy etc.

COVID-19 infects through droplets and contact with the mucous membranes. **It does not infect through the skin.**

The greatest element of risk for an EFR from COVID-19 is transfer of the virus to their mucous membranes of the eyes, nose or mouth through contact of contaminated hands (including contaminated gloved hands). The key interventions to manage this risk are to minimise hand contamination (keep your hands to yourself when possible), avoid touching your face and clean your hands frequently (with alcohol hand-rub or soap and water).

There is also a significant risk of direct transfer of the virus on to mucous membranes by droplet transmission, that is, by direct impact of larger infectious virus droplets generated from the patient's respiratory tract landing directly in the eyes, nose or mouth of the first aider. This is most likely to happen if you are within one metre of a patient with COVID-19 infection. This risk is managed by use of appropriate PPE (gloves, facemask, gown and eye protection) and by requesting the patient to wear a surgical facemask and cover their nose and mouth when coughing or sneezing (respiratory hygiene and cough etiquette).

There is evidence that airborne transmission can occur when certain procedures, aerosol generating procedures (AGPs), are performed. The biggest AGP risk is related to an EFR performing CPR, BVM ventilation and suctioning on a patient.

COVID-19 has a low prevalence in the community currently and by far the most common EFR interactions will be non-COVID-19 related. However, due to the probability of infection it is necessary to regard all patients encountered as potentially infected with COVID-19.

Using the general principals;

- Complete a preliminary assessment, if possible, while maintaining social distancing (currently > 2 metres).
- The preliminary assessment to involve the screening questions for COVID-19.

Screening questions for COVID-19 infection

Do you have any new cough or new shortness of breath?

Do you have a high temperature/ fever?

Have you had contact with a confirmed COVID-19 patient within the past 14 days?

If **yes to any** question regard the patient as suspect COVID-19

If **no to all** questions regard the patient as low risk for COVID-19

Clinical incidents encountered by EFRs may be divided into three sub groups;

1. **Minor injuries.** Many of these patients could provide self-help under direction from the EFR, thus maintaining social distancing. The EFR should encourage 'supervised self-help' (from a safe distance) i.e. instruct the patient to wash a minor wound and then apply a plaster to themselves. The successful application of this model of care will reduce the requirement to don PPE every time a person is encountered with a minor injury etc. No PPE is required, therefore, provided that social distancing is maintained. Follow EFR CPGs when advising care provision.
2. **Presentations that require an intervention and/or follow up care where COVID-19 is not identified through screening.** Many of these presentations will require direct contact with the patient inside the social distance requirement. Appropriate PPE is therefore required. This includes gloves, fluid resistant apron, surgical facemask and eye protection. Follow EFR CPGs after donning PPE.
3. **A COVID-19 suspected presentation.** To minimise droplet infection, patients who are screened as COVID-19 positive should be offered a surgical facemask and requested to don it. These patients may or may not require a direct clinical intervention therefore they should be cared for under two protocols;
 - 3.1 No direct contact required and social distancing maintained between patient and EFR. Provide self-help under direction from the EFR. No PPE is required. Follow EFR CPGs when advising care provision.
 - 3.2 Direct contact required. PPE is mandatory which includes gloves, surgical facemask, fluid repellent long sleeved gown and eye protection. Follow EFR CPGs after donning PPE.

Firefighter EFRs will typically hand over patients to a PHECC practitioner unless the patient refuses ambulance transport.

EFR care in specific industries may have one of five outcomes;

- a) Return to the workplace, no follow up care required.
- b) Advise GP follow up.
- c) Advise occupational health follow up.
- d) Advise Emergency Department follow up.
- e) Call 112 for an emergency ambulance.

If b), c) or d) are advised and the EFR/other employee accompanies the patient to the location both the patient and the EFR/ other employee must wear a surgical facemask during the journey to minimise droplet infection. If a patient has been screened as COVID-19 positive any accompanying

person must wear full PPE as the maintenance of social distancing will not be possible within a vehicle.

Specific clinical presentations/interventions;

Oxygen – if responders are administering oxygen it should be administered at the lowest appropriate flow rate, with a surgical facemask over same, if patient tolerates this. The use of a nasal cannula oxygen delivery system will minimise aerosol distribution of the virus.

Unresponsive patients; If the patient is unresponsive, check for breathing without using the look, listen and feel (ear to the patient's mouth) process.

Cardiac arrest; patients in cardiac arrest should have compression only CPR applied. An AED should be used as normal. <https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/layrescuersguidance/>

BVM – Emergency First Responders, who are trained to use a BVM, may do so but should ensure a viral filter (compliant with BS EN ISO23328-1:2008) is attached. To ensure a good seal on the facemask, to minimise droplet risk, the two-person operation of the BVM is recommended.

Suctioning – should be avoided where possible. Portable suction units entrain and exhale room air, which although not directly from the patient, may contribute to droplet dispersion. This is particularly important in confined spaces (e.g. first aid room, vehicles etc.).

When aerosol generating procedures are deployed, the EFR should ensure hand hygiene, wear a FFP2 facemask, don eye protection, gloves and long sleeve gown to minimise infection transmission.

When the patient encounter is complete, doff and dispose of the PPE appropriately and finally wash your hands.

The advice herein is designed to keep you safe, however, should your workplace occupational physician issue a more detailed/specific level of infection prevention and control please follow it.

Keep safe,



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