CLINICAL UPDATE

12th March 2021

Continuing to work safely – IPC Precautions

There have been questions raised by healthcare staff and staff groups in relation to the IPC precautions recommended within the national guidance and we would like to reiterate to staff the measures being taken and that must continue to ensure safety.

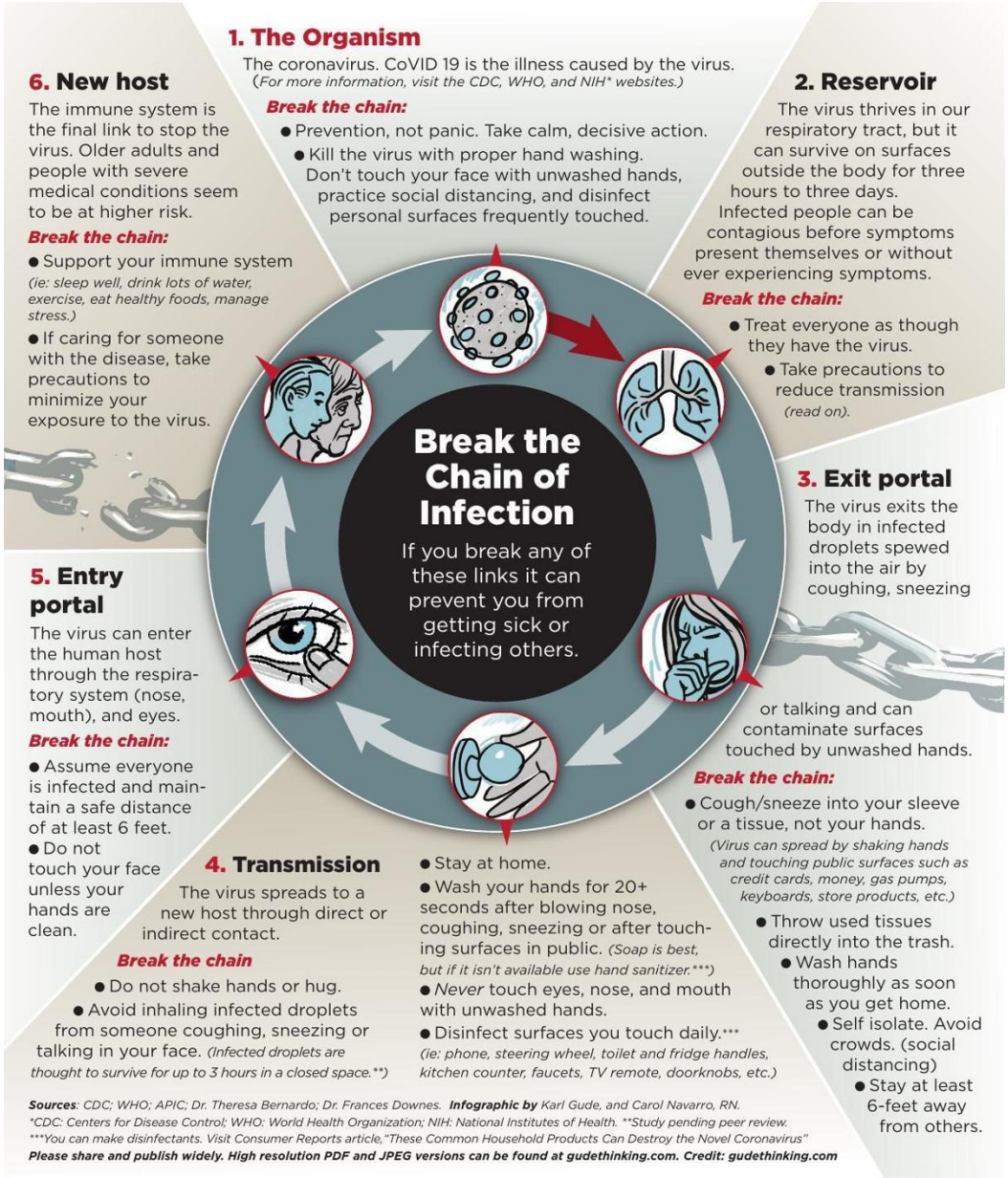
The NASIPCG is made up of the Heads of IPC from all UK Ambulance Services and represents the Ambulance sector within the National IPC Cell, which is responsible for the development and review of the National IPC Guidance. The IPC cell consists of IPC specialists from Healthcare and Public Health across the four nations, and currently meets weekly to review the latest evidence and guidance.

Transmission modes

There have been questions raised about whether COVID-19 is spread via airborne transmission, the current position within national and international guidance is that COVID-19 is predominately spread via the droplet/ contact route. It is important to understand that the presence of aerosols is not confirmation of the presence of viable pathogens. Some of this originates from terms that have become widely used and often over simplified, for example aerosols and aerosol generating procedures (AGP). AGPs are procedures which not only have the potential to generate aerosols, but also, and more importantly are associated with an increased risk of infection. It is acknowledged that when we breath, talk, cough etc. respiratory particles of varying sizes are produced ranging from aerosols to large droplets. Although, these respiratory droplets are produced, transmission is dependent on the viable infectious dose carried within these particles.

Precautions and safety measures

To help staff undertake an appropriate dynamic risk assessment it is important to remember the chain of infection and how the precautions can break the chain:



There is lots of discussion about specific elements of the IPC precautions and whether they are effective for the risk of COVID-19 transmission. The IPC precautions are a package of measures to reduce the risk. Each of the components are required and play their part in breaking the chain of infection. When you consider the hierarchy of controls, PPE is the last level of protection.

Ventilation is a significant factor in reducing the risk of transmission, and wherever possible natural ventilation should be encouraged. Whether that be opening a window/ door a little on scene or opening the window in the crew room/ cab. There have been questions raised regarding the ventilation within the ambulances, which can understandably cause anxiety. However, the standard specification for the ambulance ventilation system is 20 air changes per hour as a minimum. The standard for hospital treatment rooms is 6-12.

An unpublished independent study conducted by Cranfield University into the airflow within ambulances, has found that the ventilation within ambulance is effective and confirms that the current guidance reflects the best strategy of maximising ventilation. Furthermore, it has found that although setting the ventilation system to extract is preferable using the ventilation system without extract on is similarly effective in removing airborne particles.

EEAST continues to encourage and support staff to undertake an appropriate dynamic risk assessment, with due consideration of the presenting risks, environment, your IPC training and recommended IPC precautions.

Personal Protective Equipment and standard precautions

As stated, PPE is only one measure in the set of precautions used to mitigate infection risk. It is important that the use of PPE is not perceived as a precaution that supersedes other precautions. If tasks can be avoided and/or modified to reduce contact with staff and patients, then these measures should be implemented first. Using PPE is a measure that **MUST** be used in conjunction with all other precautions including;

- patient placement and assessment for infection risk (screening/triaging)
- hand hygiene
- respiratory and cough hygiene
- personal protective equipment
- safe management of the care environment
- safe management of care equipment
- safe management of healthcare linen
- safe management of blood and body fluids
- safe disposal of waste (including sharps)
- occupational safety: prevention and exposure management
- maintaining social/physical distancing

The required level of PPE to be **used as a minimum for the care of all patient's contacts** is currently**;**

Level 2: For all direct patient care, within 2m of a patient

• disposable gloves

• disposable apron

• fluid resistant surgical mask (Type IIR) (FRSM)

• eye protection/face shield (if risk of splashing and for all suspected/confirmed COVID-19 patients)

Level 3: Within 2m of a patient when aerosol generating procedures have been performed

• disposable gloves

• fluid repellent coveralls

• FFP3 or powered respirator hood

• eye protection/face shield (not required with a powered respirator)

Care should be taken to ensure that PPE is donned and doffed correctly to avoid inadvertent contamination.