

COVID-19: Reducing the risk of transmission and selecting the appropriate respiratory protective equipment / personal protective equipment

As restrictions change, we are aware that risk assessment and reducing transmission levels has become more complex.

Due to this situation we recommend that SLTs use the Royal College of Nursing (RCN) risk assessment framework and discuss approaches to risk assessment with local settings, managers, and local health and safety leads/competent persons.

While local infection prevention and control (IPC) teams may want to focus only on risk assessment against the aerosol generating procedures (AGP) list, evidence shows that this is an outdated approach. Therefore it is critical that a competent person employed by the organisation is consulted and, in line with COSHH requirements, a suitable and sufficient risk assessment is undertaken, taking into account potential or actual risks to all employees, and also non-employees who may be affected by the work activity.

Risk assessment

It is proposed that:

1. The [RCN Risk Assessment Toolkit](#) is used.
2. The following six principles be used as part of an informed risk assessment process, to be undertaken locally and in conjunction with the employer/local IPC team:

Person

This means patient, client or service user: consider their respiratory illness(es), current infection status (known or suspected) and clinical vulnerability. Do you need more information?

Place

Consider the level of ventilation in the environment in which you are seeing the person. Can this be improved? Ventilation **does NOT provide** protection at close quarters.

Proximity

Consider how close you need to be to undertake the activity; eg under 1m, 1-2m, more than 2m. Less than 1 metre would be considered close contact care. Can you increase the distance without compromising care?

Procedure

What is the anticipated exposure from respiratory activities involving splash/spray and airborne/inhalable particles? Eg loud speaking/voicing, forced expiration (EMST), coughing (provocation, dysphagia assessment and therapy), sneezing (nasendoscopy), altered airways (tracheostomy, laryngectomy), group therapy settings.

Professional

Consider your personal health circumstances in terms of susceptibility and vulnerability, and the frequency of your exposure.

Protection

Consider the personal protective equipment (PPE) or respiratory protective equipment (RPE) you need to adequately protect yourself (and others) based on anticipated risks, frequency and duration of exposure.

Additional controls

With community transmission levels fluctuating, a reduction in regular testing, and a lack of clarity regarding the COVID-19 status of service users, as well as with selecting appropriate levels of RPE, it is critical to use other controls available to reduce the risk of transmission of COVID-19. These include:

- increasing ventilation (either by opening windows or mechanical means);
- wearing an appropriate mask when providing care in close proximity to the service user (ventilation will not reduce risks in close care scenarios); and
- following surface/hand decontamination procedures.

Types of face masks/protection

There are a range of masks and this table provides an overview of those commonly used by SLTs. The full range of RPE can be found in the RCN risk assessment toolkit:

[COVID-19 workplace risk assessment toolkit | Royal College of Nursing \(rcn.org.uk\)](https://www.rcn.org.uk/COVID-19-workplace-risk-assessment-toolkit)

Type	Example image	Details
<i>All masks should be labelled as tested and certified medical devices</i>		
Surgical masks <ul style="list-style-type: none">• Type I• Type II		Helps to stop the spread of saliva or respiratory secretions exhaled by the person wearing it . This helps stop the spread of the virus and other potentially harmful bacteria. From HSE guidance: https://www.hse.gov.uk/research/rrpdf/rr619.pdf <i>Surgical masks are not intended to provide protection against infectious aerosols. The guidance recommends that procedures that are likely to generate aerosols should be minimised, or where unavoidable, workers should wear appropriate respiratory protection. There is a common</i>

		<p><i>misperception amongst workers and employers that surgical masks will protect against aerosols.</i></p>
<p>Fluid-resistant surgical mask (FRSM)</p> <ul style="list-style-type: none"> • Type IIR 		<p>Includes an additional splash resistant layer which protects against fluid transfer if the wearer coughs or sneezes.</p> <p>The HSE have never approved FRSMs as RPE and FRSMs are not certified for use as personal protective devices.</p>
<p>FFP2 respirators</p> <p><i>(Note: N95 is the equivalent American standard mask filtering 95% of airborne particles)</i></p>		<p>Prevents the wearer from inhaling particles and vapours (minimum of 94% filtration percentage and a maximum of 8% leakage to the inside). This is a fluid-resistant mask and so protects the wearer from droplets when someone close to the wearer coughs or sneezes.</p> <p>If provided by your employer, and in order to comply with health and safety legislation, these will need to be fit tested, by a person competent to do so, for the type of FFP2 mask supplied.</p> <p>Unlike FFP3 masks (described below) FFP2 masks may be provided either with ear loops or with two straps which go round the head. Straps provide better efficiency in terms of leakage. The effectiveness of these tight-fitting masks depends upon the tightness with which it is held to the face. The types with ear loops do not provide such a tight fit as those with straps which, when fitted correctly, provide an upwards and inwards 'pull' of the mask towards the skin. We recommend members use the types with straps.</p> <p>If these are purchased by healthcare workers to reassure others and/or for personal reassurance, then we would recommend that manufacturers' instructions on fitting and removal (donning and doffing) are followed.</p> <p>Donning: https://www.youtube.com/watch?v=udvDomUf5al</p> <p>Doffing: https://www.youtube.com/watch?v=oUo5O1JmLH0</p>

<p>FFP3 respirators</p>		<p>Prevents the wearer from inhaling particles and vapours (minimum filtration of 99% and a maximum leakage of 2% to the inside). Fluid-resistant and closer fitting to the face. Have to be fit tested and manufacturers' instructions on donning and doffing followed.</p> <p>Donning: https://www.youtube.com/watch?v=udvDomUf5aI</p> <p>Doffing: https://www.youtube.com/watch?v=oUo5O1JmLH0</p>
<p>Face visor/shield</p>		<p>Can be used alongside a mask if blood and/or body fluid contamination to the wearer's eyes or face is likely – for example, during aerosol generating procedures.</p>
<p>Transparent Masks, eg ClearMasks™</p>		<p>Clear-fronted mask, making the mouth and face visible to facilitate communication with those who rely on lip-reading and use facial expression to support communication; this includes people who are d/Deaf, have a learning disability, autism or dementia.</p> <p>At present the compliant transparent face masks which are available are only equivalent to a fluid-resistant Type IIR surgical mask. Transparent masks, when worn correctly should provide adequate protection against large droplets, splashes and contact transmission. They cannot be used to replace FFP2, FFP3 or PAPR respirators, or be used where care is being provided in close quarters, in poorly ventilated spaces, or with service users who may be COVID-19 positive or whose status is unknown.</p>

The FFP score stands for 'filtering face piece' and comes from the European standard [EN standard 149:2001](#)

Images taken from [3M Healthcare](#), [Medline Industries](#) and [ClearMask™](#)

Raising concerns if you do not feel that local risk assessments and protection provided is inadequate

In the event that you consider local risk assessments to be inadequate, you should speak to your manager in the first instance. All employers should have a formal policy for raising concerns, which you should consult for guidance on how to raise your concern in the first instance. The policy should detail with whom you should raise your concern. You should also complete an incident form. Each UK country will have a process for escalating concerns to their respective health and care regulator (for example Care Quality Commission in England for patient safety) as well as the Health and Safety Executive or Health and Safety Executive Northern Ireland for concerns relating to the safety of employees. You can raise a concern either verbally or in writing.

RCSLT members should contact the RCSLT on info@rcslt.org or 020 7378 3012 for further advice.