

Personal Protective Equipment (PPE) and its use:

North Yorkshire County Council Operational Guide during the Covid-19 response

1. Introduction

The latest government guidance on PPE was updated on 10 April 2020. On 12th April a headline statement was added to emphasise that **we are currently experiencing sustained transmission across the UK**. This guidance has been enhanced with the Social Care Action Plan published 15 April 2020 and specific advice about safe working practices in care homes and considerations for PPE shortages, both published on 17 April 2020. This guidance recognises that in contexts where COVID-19 is circulating in the community at high rates, health and social care workers may be subject to repeated risk of contact and droplet transmission during their daily work. It is also understood that in routine work there may be challenges in establishing whether people meet the case definition for COVID-19 prior to a face-to-face assessment or care episode.

The national guidance sets out recommendations on the use of PPE as part of safe systems of working for health and social care workers relative to their day-to-day work. The national guidance recognises that the prevalence of COVID-19 varies across the UK and risk is not uniform. Elements of the updated guidance are intended for interpretation and application dependant on local assessment of risk.

This means within North Yorkshire and York we need to make sure we do all we can to protect our teams who are working within the community. It is therefore essential a risk assessment takes place to decide what level of PPE is required for each situation. This will promote the correct use of PPE which will protect those most at risk.

To date, we have advised staff and managers:

- To risk assess each situation and take appropriate preventative measures, with staff seeking advice from managers where they have concerns
- For situations where a person **does not** have Covid-19, or the symptoms which **could** indicate Covid-19, to take essential precautions, including regular and rigorous hand washing and cleaning of surfaces and equipment
- Where a person **does** have Covid-19, or symptoms indicating Covid-19, to comply with recommended guidance on PPE, which will vary according to whether and how the person is secreting or excreting bodily fluids.

The main guiding principles remain the same:

- Regular and effective handwashing is still one of the most important ways to prevent the spread of coronavirus.
- Those team members who are not involved in the front line delivery of care should rule out all other methods of contact before considering face to face meetings. Where this is necessary social distancing should be upheld where possible.
- Those involved in the front line delivery of care or face to face assessment should risk assess each situation. Where a person we support has not raised any concerns they might have COVID-19, ask the person if they have become unwell since our last contact and observe for symptoms of COVID-19 (a persistent cough and/or high temperature).

Ultimately, if following a risk assessment staff consider there is a risk to themselves of the individuals they are caring for then they should wear appropriate PPE to minimise the spread of COVID-19.

Each risk assessment should consider which of the modes of transmission of COVID-19 staff may be exposed to. Transmission of COVID-19 occurs primarily via contact spread (i.e. touching contaminated surfaces) or respiratory droplets (coughing/sneezing). For those undertaking aerosol generating procedures (rare in a community setting), there is an additional risk of aerosol spread. Asymptomatic individuals are still capable of spreading via surfaces, whereas symptomatic individuals e.g. with a cough are capable of spreading via respiratory droplets.

We have created a flow chart to aid decision making/risk assessment for the application of the guidance around PPE which can be found appended to this guidance.

The national guidance on Personal Protective Equipment (PPE) is changing on a regular basis in response to the Covid-19 (coronavirus) pandemic. North Yorkshire County Council wants to ensure fast, effective compliance with new advice as it is published.

On 10 April 2020, the UK Government published the Covid-19: Personal Protection Equipment Plan: <https://www.gov.uk/government/publications/coronavirus-covid-19-personal-protective-equipment-ppe-plan>

The plan has three strands: guidance, distribution and future supply. Strand one is about being clear who needs PPE, what type and in what circumstances. There is enough PPE to go around, but it's a precious resource and must be used only where there is a clinical need to do so.

This Operational Guide has been written to help staff and managers understand the new guidance and to know what infection control measures to use and support decision-making around the use of PPE.

It builds on previous advice and includes the new guidance from 10 April 2020 and update of 12 April 2020. The advice in this Guide is subject to

change as the national guidance changes and the situation evolves. Colleagues will be made aware of any changes as they happen.

2. Ensuring the availability and best use of PPE

Protecting the public, our staff and managers during the Covid-19 pandemic is vital. PPE plays a critical role in reducing the risk of transmission of the virus.

North Yorkshire County Council is constantly pursuing new supplies of PPE as it is vital that we have sufficient protective equipment. However, in some cases, deliveries are being disrupted or delayed. It is therefore important that we take calm, sensible risk-assessed decisions regarding use of PPE that will protect staff and the people who use services.

Local PPE supply contacts have been established in each service area and managers and staff should escalate any supply issues to the relevant contact.

Local businesses have kindly donated various types of face mask. Not all of these are the preferred type (Type IIR fluid resistant masks). However, these will be stored as an emergency back-up for if preferred supplies run short, as they will still afford some protection if used properly. In that emergency situation, additional training will be provided.

3. Covid-19 and its symptoms

Colleagues should have a good understanding of Covid-19 (coronavirus) and its symptoms. Please visit the Working together through Covid-19 intranet pages for key information and guidance:

<http://nyccintranet/content/working-together-through-covid-19-0>

When considering the best approach around PPE, remember:

- Covid-19 is a new virus with no known population immunity - this means everyone is potentially susceptible
- transmission is mainly through:
 - respiratory droplets generated by coughing and sneezing
 - contact with contaminated surfaces.

- the virus can survive on surfaces and objects for up to 72 hours depending on temperature, humidity and surface type but typically lasts for a few hours.

This means hand washing and cleaning of surfaces will always be a critical component of preventing transmission.

4. Standard Infection Control Precautions

Standard infection control precautions (SICPs) are the basic steps needed to reduce the risk of transmission. They should be followed by **all staff, in all care settings, at all times**, for all people who use services whether infection is known to be present or not.

Hand hygiene

Hand hygiene is essential to reduce the transmission of infection. This includes:

- washing with soap and water, and thorough drying of the hands
- using alcohol based hand rub (also known as hand sanitizer) if soap and water are not available
- washing with soap and water more often for 20 seconds

Hand Hygiene should be done by staff and visitors:

- on arrival at your workplace
- when hands are soiled
- before and after touching a resident or their belongings
- before and after touching any equipment
- before handling food and drink or vaping/smoking
- before leaving the workplace
- before entering or leaving a clinical area
- before and after each episode of clinical / personal care



Respiratory and cough hygiene

We can reduce transmission through good respiratory hygiene measures

- visitors with coughs or other respiratory symptoms should not enter and should be advised to follow self-isolation guidance
- disposable, single-use tissues should be made available and used
- disposing of used tissues promptly in the nearest waste bin
- waste bins (lined and foot operated) and hand hygiene facilities should be available
- cleaning hands after coughing or sneezing and using tissues after any contact with respiratory secretions and contaminated objects
- encourage people to keep their hands away from the eyes, mouth and nose
- some residents may need assistance to contain respiratory secretions (for example coughs and sneezes)
- people who cannot move independently will need a container (e.g. a plastic bag) nearby for disposal of tissues
- in common areas or during transportation, people with symptoms may wear a fluid-resistant (Type IIR) surgical face mask (FRSM), if possible, to minimise spread of respiratory secretions and reduce contamination

5. Use of PPE where a person has no Covid-19 symptoms

COVID-19 is spread through respiratory droplets (e.g. coughing) or via surfaces. People without symptoms will not be coughing, so PPE intended to prevent respiratory droplets (e.g. masks) is not necessary.

- If neither the worker nor the person receiving support are symptomatic, then no PPE is required above and beyond normal good hygiene practices - especially hand washing.
- Regular hand washing and cleaning surfaces and equipment that a non-symptomatic individual may have used/touched are the key measures needed to prevent further spread of infection.

- If staff believe there is a risk to themselves or the individuals they are caring for they need to contact their Line Manager / Team Leader to complete an immediate risk assessment (see Section 6 below).
- For delivery of care to any individual who meets the criteria for shielding (specific vulnerable groups), or if there is someone in their household who meets shielding criteria, a minimum, single use disposable plastic aprons, surgical mask and gloves must be worn for the protection of the person. If the individual is encountered in any context described or if they meet the case definition, then additional PPE should be applied as above.
- If passenger transport drivers are conveying any individual to essential appointments, that is not currently a possible or confirmed case, in a vehicle without a bulkhead, no direct delivery of care and within 2 metres please see table 4 for relevant PPE which advises the use of a surgical mask.
- For people who support with transport, for example, transport assistants then PPE should be the same as a person who delivers direct care. This should be appropriately risk assessed taking into account the presence of covid-19 symptoms and the nature of the contact.

6. Risk assessment during the Covid-19 pandemic

Before providing direct care to an individual, a risk assessment should take place. Take the following steps:

1) Initial Risk assessment

- Where possible conduct an initial risk assessment by phone, or by some other remote triage process.
- This should be done prior to entering the person's home, work premises or clinical area.
- It can also be done at a distance of 2 metres on entering a premises for example in a care home review the person for symptoms before delivering care.

2) Assess the risk of virus transmission

- If an individual has no symptoms and is NOT being shielded, then follow the advice in Section 5 above.
- If an individual is displaying any Covid-19 symptoms, then follow the advice below at Table 2
- If you are unsure, is there evidence of sustained transmission of virus in that setting? If so, then follow guidance below.

3) Sustained Transmission

Settings should be individually risk assessed to determine whether sustained transmission is occurring. In the community, this is likely to be care homes or other residential units where there is evidence of an outbreak, with transmission between individuals in that setting (i.e. not just admission of Covid-19 positive cases directly from hospital).

In these situations, sessional use of face masks and eye protection may be suitable (not aprons/gloves – these should still be changed between individual people supported). A session starts/ends when a staff member enters/leaves an exposure environment – in this case, if the entire care home (or potentially a single floor/building if cohorting is in place) is considered an environment with sustained transmission, then masks/eye protection could be worn from entering this area until leaving (N.B. masks should always be replaced when they become damp).

As part of the **risk assessment** you should also consider:

- **What procedures are going to be done?**
If these involve personal contact within 2 metres consider use of PPE.
- **Is the staff member in a setting or role where they will be in frequent contact with people where their COVID-19 status is unknown?** Consider sessional PPE as per guidance at Table 4. If deemed necessary after the risk assessment, the worker should wear a fluid repellent surgical mask with or without eye protection, as determined by the risk assessment.
- **Use PPE depending on type of care provided and likely risk**
Examples include splashing, or any aerosol generating procedures (see below). PPE should only be used if care is provided within 2 metres of a person with Covid-19 symptoms.

- When there is an anticipated/likely risk of contamination with splashes, droplets of blood or body fluids. **Where staff consider there is a risk to themselves or the individuals they are caring for they should wear a fluid repellent surgical mask with or without eye protection as determined by the individual staff member for the care episode/single session. This would also apply in people's homes where direct care is delivered and Covid-19 status is unknown.**

See tables 2 and 4.

7. Types of PPE that may be used

The standard PPE to be used is:

- fluid repellent surgical mask (Type IIR)
- gloves
- apron
- eye protection only if there is a risk of splashing bodily fluids in the eyes

Aerosol Generating Procedures

Aerosol Generating Procedures (AGPs) is the name for a range of medical procedures which can increase the risk of infection – for example a tracheostomy procedure.

The appropriate PPE for any aerosol generating procedure is:

- FFP3 mask
- long sleeve gown

Both should be disposable. If no long sleeve gowns are available, ensure arms are bare below the elbow and wash up to elbow.

Note it is highly uncommon for any AGPs to happen outside of a hospital so use of this PPE will not be necessary for the majority of staff in social care.

Single session use of PPE

Fluid repellent (Type IIR) surgical masks (FRSM), eye protection and long sleeved disposable fluid repellent gowns can be subject to single session use.

A single session refers to a period of time where a health and social care worker is undertaking duties in a specific clinical care setting or exposure environment. For example, a session might comprise a ward round, or taking observations of several patients in a cohort bay or ward.

A session ends when the health and social care worker leaves the clinical care setting or exposure environment. Once the PPE has been removed it should be disposed of safely. The duration of a single session will vary depending on the clinical activity being undertaken.

PPE needs to be put on immediately BEFORE an episode of care and removed immediately AFTER.

The order in which PPE needs to be removed is

1. Gloves
2. Apron
3. Mask/eye protection

PPE needs to be used properly and therefore:

Masks should

- Be well-fitting covering both nose and mouth
- Not dangle around the neck after or between use
- Not be touched once in position
- Be changed when they become moist
- Be worn once then disposed of – hand hygiene should be performed after disposal (In care homes / supported living this can be for the duration of a shift or until a break)

Gloves must

- be worn when providing direct care and exposure to blood and/or other body fluids is likely - including during equipment and environmental decontamination
- be changed immediately following the care episode or the task undertaken

Aprons must

- be worn to protect uniform / clothes from contamination when providing direct care and during environmental and equipment decontamination.
- be changed between patients and immediately after completion of a procedure/task.

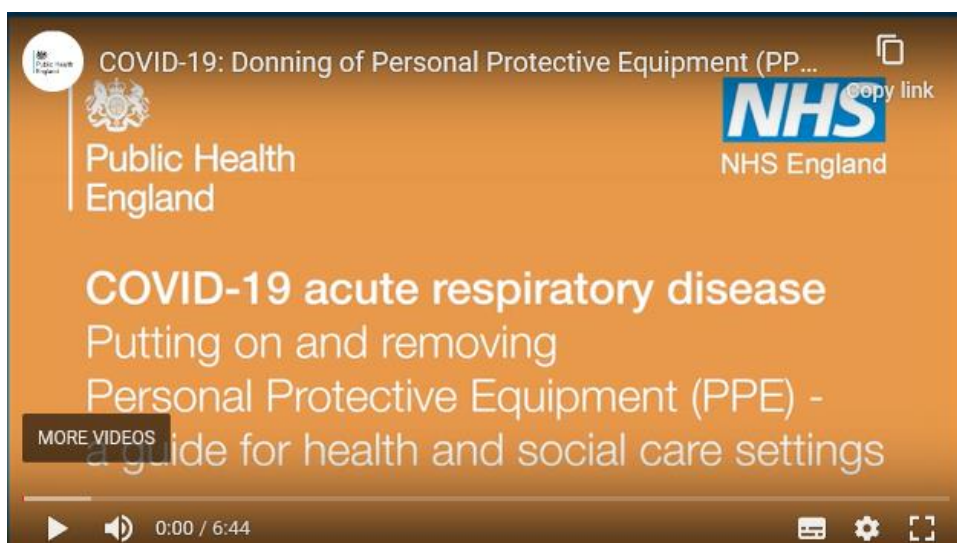
Re-use of PPE

Eye protection

- Goggles provide barrier protection for the eyes. They should fit snugly over and around the eyes or personal prescription lenses, be indirectly-vented (to prevent penetration of splashes or sprays) and have an anti-fog coating to help maintain clarity of vision.
- Re-use is currently recommended in the UK Infection Prevention and Control guidance, where the eye protection is not relabelled as single use only.

The following video from Public Health England shows the correct ways to put on (donning) and take off (doffing) PPE.

Please make sure you watch it if you think you will be required to use PPE https://youtu.be/-GncQ_ed-9w



8. Preventing spread at home as a frontline worker

The appropriate use of personal protective equipment (PPE) will protect staff uniform from contamination in most circumstances. It is best practice to change into and out of uniforms, or dedicated work clothing, at work and not wear them when travelling; this is based on public perception rather than evidence of an infection risk.

Uniforms should be transported home in a disposable plastic bag. After emptying contents, dispose of the bag into the household black bag waste stream.

Uniforms should be laundered:

- separately from other household linen;
- in a load not more than half the machine capacity;
- at the maximum temperature the fabric can tolerate, then ironed, line dried or tumbled-dried.

NB. This does not apply to community health workers who are required to travel between patients in the same uniform.

9. Application of this advice in different settings

This updated advice is active and current across all North Yorkshire Health and Social Services settings effective 12 April 2020.

Further advice regarding application of the advice in specific settings will be considered as part of the implementation process.

10. Useful links and national guidance documents:

- [COVID-19: Infection prevention and control guidance](#)
- [NHS Coronavirus guidance for clinicians](#)
- [COVID-19 List of national guidance](#)
- [COVID-19: Guidance for primary care](#)
- [COVID-19: our action plan for adult social care](#)
- [COVID-19 How to work safely in care homes](#)

- Considerations for acute personal protective equipment (PPE) shortages

Recommended PPE for primary, outpatient and community care by setting, NHS and independent sector

Setting	Context	Disposable Gloves	Disposable Plastic Apron	Disposable fluid-repellent coverall/gown	Surgical mask	Fluid-resistant (Type IIR) surgical mask	Filtering face piece respirator	Eye/face protection ¹
Any setting	Performing an aerosol generating procedure ² on a possible or confirmed case ²	✓ single use ⁴	✗	✓ single use ⁴	✗	✗	✓ single use ⁴	✓ single use ⁴
Primary care, ambulatory care, and other non emergency outpatient and other clinical settings e.g. optometry, dental, maternity, mental health	Direct patient care – possible or confirmed case(s) ² (within 2 metres)	✓ single use ⁴	✓ single use ⁴	✗	✗	✓ single or sessional use ^{4,5}	✗	✓ single or sessional use ^{4,5}
	Working in reception/communal area with possible or confirmed case(s) ² and unable to maintain 2 metres social distance ⁵	✗	✗	✗	✗	✓ sessional use ⁵	✗	✗
Individuals own home (current place of residence)	Direct care to any member of the household where any member of the household is a possible or confirmed case ^{2,7}	✓ single use ⁴	✓ single use ⁴	✗	✗	✓ single or sessional use ^{4,5}	✗	✓ risk assess single or sessional use ^{4,5,8}
	Direct care or visit to any individuals in the extremely vulnerable group or where a member of the household is within the extremely vulnerable group undergoing shielding ⁹	✓ single use ⁴	✓ single use ⁴	✗	✓ single use ⁴	✗	✗	✗
	Home birth where any member of the household is a possible or confirmed case ^{2,7}	✓ single use ⁴	✓ single use ⁴	✓ single use ⁴	✗	✓ single or sessional use ^{4,5}	✗	✓ single or sessional use ^{4,5}
Community-care home, mental health inpatients and other overnight care facilities e.g. learning disability, hospices, prison healthcare	Facility with possible or confirmed case(s) ² – and direct resident care (within 2 metres)	✓ single use ⁴	✓ single use ⁴	✗	✗	✓ sessional use ⁵	✗	risk assess sessional use ^{2,5}
Any setting	Collection of nasopharyngeal swab(s)	✓ single use ⁴	✓ single or sessional use ^{4,5}	✗	✗	✓ single or sessional use ^{4,5}	✗	✓ single or sessional use ^{4,5}

Table 2

1. This may be single or reusable face/eye protection/full face visor or goggles.
2. The full list of aerosol generating procedures (AGPs) is within the IPC guidance (note AGPs are undergoing a further review at present).
3. A case is any individual meeting case definition for a possible or confirmed case: <https://www.gov.uk/government/publications/wuhan-novel-coronavirus-initial-investigation-of-possible-cases/investigation-and-initial-clinical-management-of-possible-cases-of-wuhan-novel-coronavirus-wm-cov-infection>
4. Single use refers to disposal of PPE or decontamination of reusable items e.g. eye protection or respirator, after each patient and/or following completion of a procedure, task, or session; dispose or decontaminate reusable items after each patient contact as per Standard Infection Control Precautions (SICPs).
5. A single session refers to a period of time where a health care worker is undertaking duties in a specific care setting/exposure environment e.g. on a ward round; providing ongoing care for inpatients. A session ends when the health care worker leaves the care setting/exposure environment.
Sessional use should always be risk assessed and considered where there are high rates of hospital cases. PPE should be disposed of after each session or earlier if damaged, soiled, or uncomfortable.
6. Non clinical staff should maintain 2m social distancing, through marking out a controlled distance; sessional use should always be risk assessed and considered where there are high rates of community cases.
7. Initial risk assessment should take place by phone prior to entering the premises or at 2 metres social distance on entering; where the health or social care worker assesses that an individual is symptomatic with suspected/confirmed cases appropriate PPE should be put on prior to providing care.
8. Risk assessed use refers to utilising PPE when there is an anticipated/likely risk of contamination with splashes, droplets or blood or body fluids.
9. For explanation of shielding and definition of extremely vulnerable groups see guidance: <https://www.gov.uk/government/publications/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19>



Additional considerations, in addition to standard infection prevention and control precautions,

where there is sustained transmission of COVID-19, taking into account individual risk assessment for this new and emerging pathogen, NHS and independent sector

Setting	Context	Disposable Gloves	Disposable Plastic Apron	Disposable fluid-repellent coverall/gown	Surgical mask	Fluid-resistant (Type IIR) surgical mask	Filtering face piece respirator	Eye/face protection ¹
Any setting	Direct patient/resident care assessing an individual that is not currently a possible or confirmed case ² (within 2 metres)	✓ single use ³	✓ single use ³	✗	✗	✓ risk assess sessional use ^{4,5}	✗	✓ risk assess sessional use ^{4,5}
Any setting	Performing an aerosol generating procedure ⁶ on an individual that is not currently a possible or confirmed case ^{2,7}	✓ single use ³	✗	✓ single use ³	✗	✗	✓ single use ³	✓ single use ³
Any setting	Patient transport service driver conveying any individual to essential healthcare appointment, that is not currently a possible or confirmed case in vehicle without a bulkhead, no direct patient care and within 2 metres	✗	✗	✗	✓ single use ³	✗	✗	✗

Table 4

1. This may be single or reusable face/eye protection/full face visor or goggles.

2. A case is any individual meeting case definition for a possible or confirmed case: <https://www.gov.uk/government/publications/wuhan-novel-coronavirus-initial-investigation-of-possible-cases/investigation-and-initial-clinical-management-of-possible-cases-of-wuhan-novel-coronavirus-wu-n-cov-infection>

3. Single use refers to disposal of PPE or decontamination of reusable items e.g. eye protection or respirator, after each patient and/or following completion of a procedure, task, or session; dispose or decontaminate reusable items after each patient contact as per Standard Infection Control Precautions (SICPs).

4. Risk assess refers to utilising PPE when there is an anticipated/likely risk of contamination with splashes, droplets of blood or body fluids. Where staff consider there is a risk to themselves or the individuals they are caring for they should wear a fluid repellent surgical mask with or without eye protection as determined by the individual staff member for the care episode/single session.

5. A single session refers to a period of time where a health care worker is undertaking duties in a specific care setting/exposure environment e.g. on a ward round; providing ongoing care for inpatients. A session ends when the health care worker leaves the care setting/exposure environment. Sessional use should always be risk assessed and consider the risk of infection to and from patients, residents and health and care workers where COVID-19 is circulating in the community and hospitals. PPE should be disposed of after each session or earlier if damaged, soiled, or uncomfortable.

6. The list of aerosol generating procedures (AGPs) is included in section 8.1 at: www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control/covid-19-personal-protective-equipment-ppe. (Note APGs are undergoing a further review at present)

7. Ambulance staff conveying patients are not required to change or upgrade PPE for the purposes of patient handover.

