

# Personal Protective Equipment (PPE)

## Printable learning resource

### What is this resource?

This resource is based on the e-learning module “NES: Personal Protective Equipment (PPE)” from the **Scottish Infection Prevention and Control Education Pathway**.

The aim of this document is to make the e-learning content available to learners who

- do not have regular access to a computer and/or a network
- do not yet have the necessary IT skills or confidence to complete e-learning
- have different needs and therefore e-learning is not suitable for them.

All screen captures from the original module are included.

### How should this resource be used?

This resource can either be

- uploaded as a PDF file to tablets or other digital devices without internet access, or
- printed. (Printing in black and white is sufficient.)
  
- All navigational instructions on the screens in this document should be ignored.
  
- We have given instructions on how to complete interactivities and questions.
  
- A space has been provided for staff to make any additional notes after each topic.

### Internet access

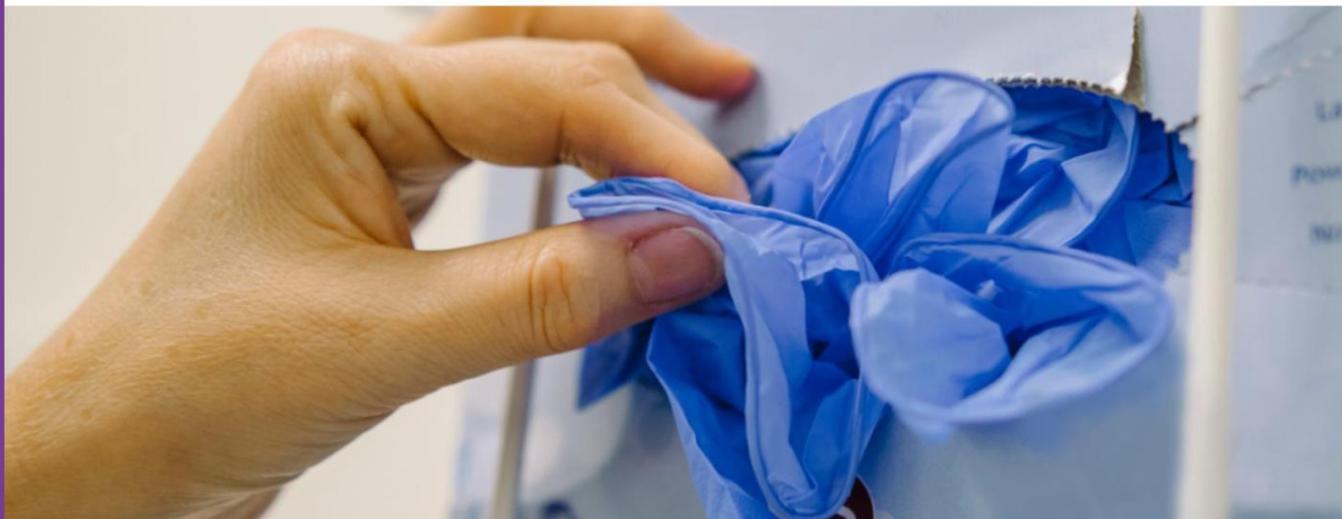
Internet access is required for the following:

**Online feedback form and web links** for additional resources. Staff should be enabled to use web links and complete the feedback form if at all possible.

**Online assessment.** The online version of this resource consists of the e-learning module and a separate online assessment, and staff should be enabled and encouraged to complete this online assessment locally.



# Personal Protective Equipment (PPE)



[Learn how to navigate this module.](#)

Start

## Aim and target audience

The aim of this module is to help you to **correctly choose, safely use and discard** PPE at the **appropriate times** to prevent an infection **in any care setting**.

This will help prevent the risk of harm to you and others.

This module is ideal for **all staff new to health and social care**.

It's also suitable for **more experienced staff in any setting** who want to refresh their knowledge or update skills.



It's important that you have completed the **Hand Hygiene** module from the Scottish Infection Prevention & Control Education Pathway before starting this module.



## Learning outcomes

After completing this module, **you'll be able to:**

- choose the appropriate PPE for **your** tasks
- put on and remove PPE correctly
- use and discard PPE correctly
- identify and report issues or raise concerns with the use, supply or quality of PPE where you work.



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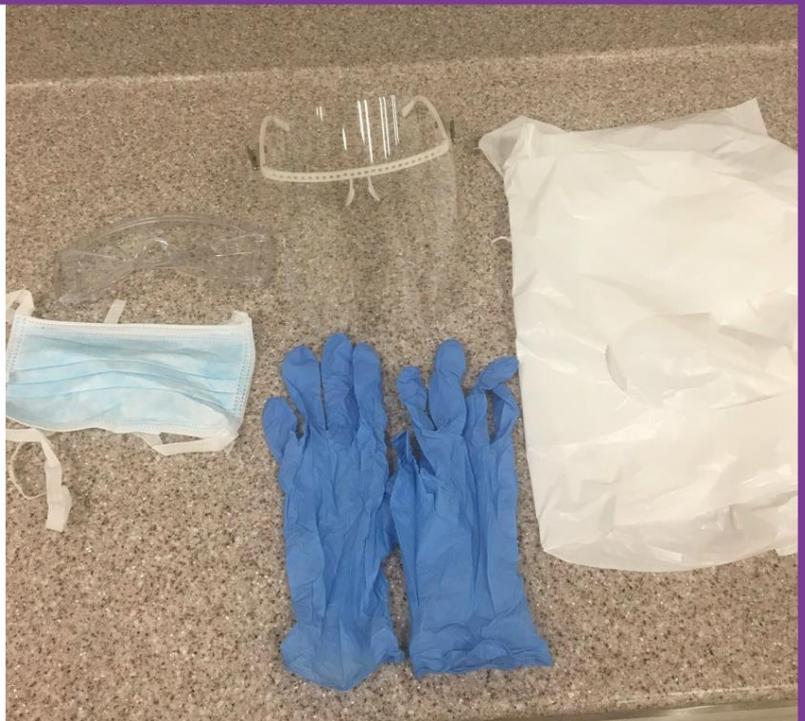
## Overview

This module has 3 topics:

- **Topic 1:** Choosing and using PPE.
- **Topic 2:** Putting on, taking off and changing PPE.
- **Topic 3:** Reporting PPE issues.

Once you've visited **all the screens** in this module, you can access the separate assessment. You need to **score 80%** in the assessment to pass and get a certificate of completion.

Remember, you can use the **Menu** to jump to any screen or to check where you are in this topic.



This module will take you about 20 **minutes** to complete.

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## Topic 1: Choosing and using PPE

You'll take a look at **frequently used PPE** and learn **how to assess** infection risks associated with common tasks in health and social care settings. This will help you **choose the correct PPE** for a task.

After that, you'll explore some scenarios where you'll choose the PPE appropriate for real-life tasks.



Remember, you can use the **Menu** to jump to any screen or to check where you are in this topic.

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> Topic 1: Choosing and using PPE

### Introducing PPE

**Personal Protective Equipment (PPE) is a requirement of health and safety legislation.** If chosen and used correctly it will help protect you and others from infection risks associated with your tasks.

**Personal Protective Equipment, or PPE, is one of 10 standard infection control precautions.**

PPE is worn during care duties to prevent and reduce the risk of transmission of micro-organisms to persons we care for, health and care workers, and the environment.

PPE can comprise of gloves, aprons, and eye or face protection, including full face visors. Disposable gloves and aprons are the most common items of PPE.

Legislation states that your employer must make these items available. As employees, you are responsible for ensuring you wear appropriate PPE.

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## Common types of PPE

Different types of PPE are used in various workplaces. PPE is chosen based on risks associated with the tasks being carried out.

**All PPE is single use unless the manufacturer states that it can be reused.**



Here are some **commonly-used types** of PPE.



You wear **non-sterile** disposable gloves when in contact with:

- blood or body fluids
- mucous membranes (eyes, nose, mouth)
- cleaning and disinfectant products
- chronic wounds (e.g. leg or pressure ulcers).



Use this **job aid** to help you correctly select your gloves.



**Eye and face protection** includes goggles, face shields and visors. You wear these during aerosol generating procedures or if there's a risk of spraying or splashing to your face when:

- in contact with blood or body fluids
- cleaning heavily-contaminated equipment
- directly carrying out procedures on people in dental care, trauma, endoscopy or operating departments.



Your **footwear** must protect you from any risks associated with a task and be:

- clean and well maintained
- non-slip
- supportive, enclosing your foot.



You wear **sterile disposable gloves** for:

- surgical procedures
- aseptic techniques
- inserting sterile devices into the body.

(Sterile gloves are NOT required e.g. for insertion of a PVC or obtaining blood cultures or when a safety device/technique is used.)



You wear **disposable plastic aprons** when:

- providing direct person care such as assisting with toileting and personal hygiene

and when in direct contact with:

- blood or body fluids
- cleaning or disinfectant solutions
- a person with a known or suspected infection.

> Topic 1: Choosing and using PPE

### Incorrect use of PPE

If you don't use PPE correctly, you and others might be at risk of infection.



Norovirus outbreak



Blood splash to eye



Failure to remove PPE



Increasing risk to others

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#### Norovirus outbreak



During a Norovirus outbreak, Joanne wore disposable gloves and an apron to clean up a spillage of diarrhoea. She answered the phone without removing her gloves. During the call, she touched her mouth, transferring the virus.



Within 24 hours Joanne was sick with Norovirus.



Joanne should have removed the PPE and performed hand hygiene before answering the phone. She put herself and others at risk of infection.



#### Blood splash to eye



Raj was wearing his regular spectacles when treating a patient who was vomiting blood in the A&E resuscitation room. Blood splashed into his eye through the sides of his spectacles.



Raj had to irrigate his eye and attend Occupational Health for assessment and follow up.



Regular spectacles are not PPE. Raj should have worn a face visor or goggles to protect his eyes.



## Failure to remove PPE



Mia is a dental hygienist and wore disposable gloves and eye protection when treating a patient. She left the examination room to speak to the receptionist while still wearing her gloves.



**A waiting patient noticed Mia was wearing gloves, and was concerned that she might spread infection in the waiting area. He was also worried that Mia wasn't changing gloves between patients.**



Mia should have removed her PPE and performed hand hygiene **before** leaving the room. This reduces the risk of any potential contamination and reassures the public.



## Increasing risk to others



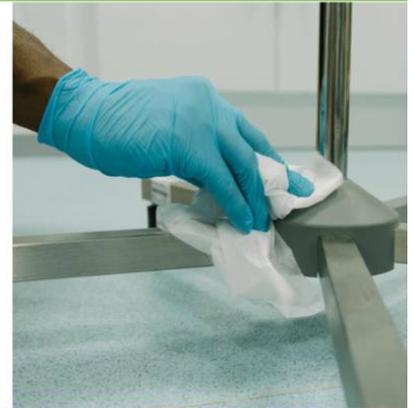
Fred put on disposable gloves and an apron to clean a care area. He cleaned the toilets, then carried on cleaning the rest of the area without changing his gloves.



**This action could transfer micro-organisms from the toilet to clean areas, putting others at risk of infection.**



Fred should work from clean to dirty tasks. When moving from a dirty to clean task, he must remove his PPE and perform hand hygiene before putting on fresh PPE.



## Risk assessments

**Micro-organisms** are everywhere. They're often spread by contaminated hands, equipment or surfaces and through the air. You need to minimise the risk of spreading infections.



Play the video to learn more about risk assessing tasks so you can choose the right PPE.



Can't see or hear the video? Read the [transcript](#).

## Chapter 5.2 - Personal Protective Equipment - Transcript

When considering what protective clothing might be required in any situation it is necessary for you to carry out a risk assessment.

This means whether the task you are about to perform will give rise to any possibility of contact with blood or other body fluids, and if there is a risk of splashing.

For example, if cleaning up a spillage of blood, cleaning equipment, or handling soiled items of clothing then PPE should be worn.

When there is no contact likely with blood or body fluid contamination, such as dispensing medicine or helping someone dress, then PPE is not normally required.

Throughout your day you will need to assess on a task-by-task basis whether any PPE is needed in order to protect you or the person you're caring for.

## Risk assessing common situations

Ask yourself these key questions to help you risk assess a task:

- What am I about to do?
- How do I protect myself and others?
- What are the infection risks?
- How do I stop micro-organisms spreading?



Consider these common situations involving different infection risks. Match the PPE needed to the correct task by dragging each PPE item into the link of a task item, then select **SUBMIT**.

Task	PPE
Transporting people receiving care (no contact)	A disposable plastic apron
Making beds	None
Dressing a leg ulcer	A disposable plastic apron and disposable non-sterile gloves

< PREV SUBMIT

Please try to answer the question above and then check the answer and the feedback on the following page. You can match the items with numbers or letters.

> Topic 1: Choosing and using PPE

### Risk assessing common situations

Ask yourself these key questions to help you risk assess a task:

- What am I about to do?
- How do I protect myself and others?
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Consider these common situations involving different infection risks. Match the PPE needed to the correct task by dragging each PPE item into the link of a task item, then select **SUBMIT**.

Task	PPE
Transporting people receiving care (no contact)	None
Making beds	A disposable plastic apron
Dressing a leg ulcer	A disposable plastic apron and disposable non-sterile gloves

< PREV SUBMIT

### Correct



That's correct.

When transporting people receiving care, you don't need PPE if you're **not in direct contact** with the person or their surroundings. But if you're in **direct contact** with the person or their surroundings, you must use a disposable plastic apron.

When making beds you need a **clean** disposable plastic apron – this prevents the contamination of clean linen from the apron used to strip the bed. You don't need disposable gloves – there's no risk of contamination from clean linen. **Hand hygiene is enough.**

When dressing chronic wounds like a leg ulcer, **non-sterile disposal gloves** are used as this is not a sterile procedure. A **disposable plastic** apron protects clothing from contamination and prevents the spread of micro-organisms from one place to another.

Continue >



SUBMIT

&gt; Topic 1:

Choosing and using PPE

## Risk assessing a vomiting patient



Robert is a clinical support worker working in an A&E department. He's caring for a patient who is vomiting a lot of blood which is uncontrolled and creating splashes.

**What PPE do you think Robert needs?**



Select **three options** that apply, then select **SUBMIT**.

- Eye/face protection
- Headwear to cover his hair
- Disposable plastic apron
- Disposable non-sterile gloves

[< PREV](#) [SUBMIT](#)

Please try to answer the question above and then check the answer and the feedback on the following page.

> Topic 1: Choosing and using PPE

### Risk assessing a vomiting patient



Robert is a clinical support worker working in an A&E department. He's caring for a patient who is vomiting a lot of blood which is uncontrolled and creating splashes.

What PPE do you think Robert needs?



Select **three options** that apply, then select **SUBMIT**.

- Eye/face protection
- Headwear to cover his hair
- Disposable plastic apron
- Disposable non-sterile gloves



< PREV SUBMIT

### Correct



**That's correct.** Robert is at high risk of splashing to his eyes, mouth and nose from the patient who is vomiting blood.

He should choose **eye/face protection** to prevent him from picking up a blood-borne virus infection.

He should wear **non-sterile disposable gloves** and a **plastic apron** to protect his hands and clothing from contamination.

**Headwear** is usually only necessary in operating theatres.

Continue >



SUBMIT

## Situations where you DON'T NEED PPE

**PPE is not required for all tasks.** Many staff commonly wear disposable gloves when they're not needed. If you overuse disposable gloves you'll probably miss hand hygiene opportunities and spread micro-organisms.



Select the arrow to see when you **DON'T NEED PPE**:

- touching intact skin
- writing in care records
- using a computer keyboard
- answering the telephone
- brushing someone's hair
- there's no potential contact with blood or body fluids
- touching, shaking or holding hands.



Select **NEXT** to continue.

### Notes for Topic 1: Choosing and using PPE



## Topic 2: Putting on, taking off and changing PPE

Now you'll learn how to **put on** and **take off** PPE and when you need to change it to protect yourself and others.



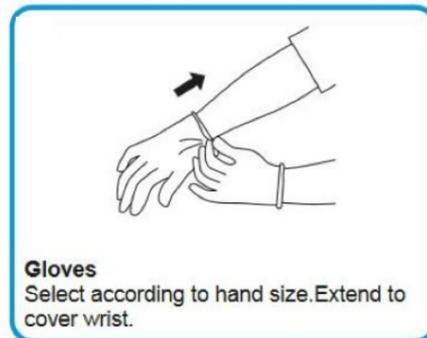
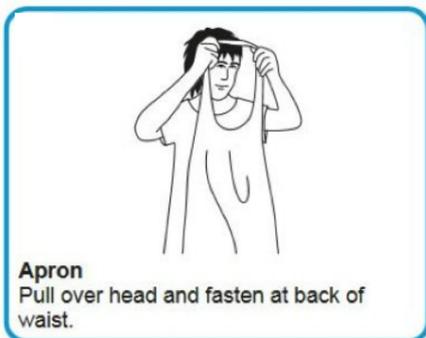
Remember, you can use the **Menu** to jump to any screen or to check where you are in this topic.

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> Topic 2: Putting on, taking off and changing PPE

### Putting on PPE

Always perform hand hygiene before you put on your PPE to prevent contamination. Then check that your PPE is clean, not damaged, and that it's the right size for you.



Check the National Prevention and Control Manual Appendix on [Putting On and Removing PPE](#) for information on how to put on eye/face protection and gowns.

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## Removing PPE safely

Even if your PPE looks clean, it could be contaminated with micro-organisms. You must follow strict procedures when removing PPE to avoid contaminating your hands, clothing, face, eyes, mouth or the environment. **ALWAYS** perform hand hygiene **AFTER** you remove and dispose of your PPE to prevent contamination.



Watch this video to learn how to safely remove and dispose of gloves and aprons.



Can't see or hear the video?  
Read the [transcript](#).



Check the National Prevention and Control Manual Appendix on [Putting On and Removing PPE](#) for information on how to remove eye/face protection and gowns.

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### Removing Gloves and Aprons - Transcript

When wearing both gloves and aprons, gloves should always be removed first. (Gloves will have had the most contact with the person and the environment, and disposing of them first reduces the risk of contamination elsewhere.)

Pull the first glove down all the way from the wrist with the other hand. Be careful not to touch your skin with the glove. Turn the glove inside out whilst removing it. Hold the removed glove in the gloved hand.

Now remove the second glove by placing the index finger of the non-gloved hand inside the glove at the wrist. Peel it off, again turning the glove inside out, enveloping the first glove at the same time.

Discard the gloves in the correct waste bin. In healthcare settings dispose of PPE in a healthcare waste stream. This may differ in care homes or a person's own home.

Once this has been completed, remove the apron by breaking the ties at the neck and waist.

Without touching the front of the apron, roll the apron inwards into a ball.

Discard the apron in the appropriate pedal operated waste bin, and perform hand hygiene.

Putting on a removing PPE link: <http://www.nipcm.hps.scot.nhs.uk/appendices/appendix-6-putting-on-and-removing-ppe/>

## Changing PPE



Watch this video to learn how to change PPE between or during tasks to minimise infection and protect yourself. After that, you'll use your knowledge to pick PPE appropriate for real-life tasks.



Can't see or hear the video? Read the [transcript](#).

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### Changing PPE - Transcript

PPE should be changed after different tasks with the same person, as well as in between individual to individual.

Once the person has been washed, the apron should be removed and new gloves and apron applied before you move to another task such as emptying the urinary drainage bag or removing a used commode.

Once a task has been completed, remove all PPE.

If at any point in a task, the health or care worker is called away from the person and care giving area, for example, to take an emergency call and leave the person they are caring for, PPE must be removed and hand hygiene performed. If not, the risk of micro-organisms transferring to other equipment and environments is increased.

New PPE should be re-applied on returning to the task.

If a health or care worker is carrying out a task requiring PPE, and is required to assist a colleague with another task, for instance, if a health or care worker is removing a commode, and a colleague requires assistance with a person's personal care, PPE must be changed and hand hygiene undertaken before assisting.

## Changing PPE: Cleaning equipment



Sarah is cleaning a bed in a care home. She's wearing disposable gloves and an apron. Just before she's finished, she's asked to come to assist Mrs Scott with her lunch in another room.



**What should Sarah do?** Choose an **option** and then select **SUBMIT**.

- Gloves are reusable, so Sarah just needs a new apron before she leaves the room.
- Keep gloves on and apply alcohol based hand rub.
- Sarah should remove all PPE and perform hand hygiene before leaving the room.
- Check that her PPE is clean. If it is, she can keep it on.

Select here to reveal some PPE tips.

< PREV SUBMIT

Please try to answer the question above and then check the answer and the feedback on the following page.

> Topic 2: Putting on, taking off and changing PPE

### Changing PPE: Cleaning equipment



Sarah is cleaning a bed in a care home. She's wearing disposable gloves and an apron. Just before she's finished, she's asked to come to assist Mrs Scott with her lunch in another room.



**What should Sarah do?** Choose an **option** and then select **SUBMIT**.

- Gloves are reusable, so Sarah just needs a new apron before she leaves the room.
- Keep gloves on and apply alcohol based hand rub.
- Sarah should remove all PPE and perform hand hygiene before leaving the room.
- Check that her PPE is clean. If it is, she can keep it on.

#### PPE tips

##### Change PPE:

- when moving from a dirty to clean task (even if continuing care on the same person)
- when moving between people receiving care
- if your PPE is heavily soiled, affecting its use
- if your gloves or apron tear
- when starting a new task.

< PREV SUBMIT

### Correct



**That's correct.**

If Sarah has finished a task, she shouldn't leave the area with used PPE as she could contaminate the wider environment.

Sarah doesn't need disposable gloves to feed a patient. However, she should put on a fresh apron because she's moving from a dirty to a more clean task.

Hand hygiene should **never** be carried out when still wearing gloves as they are single use only and the products can damage the gloves which are not then safe to use.

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## Changing PPE: Paramedics



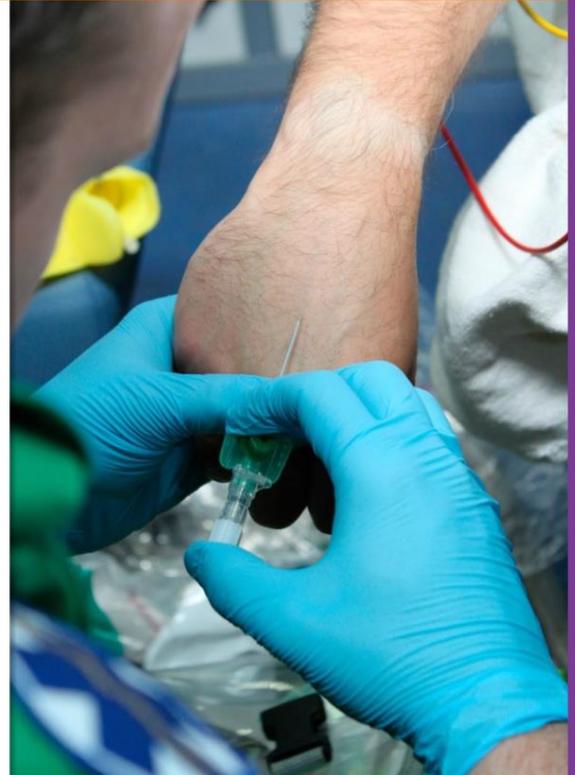
Andy is a paramedic working in an ambulance with a patient who is bleeding.

Andy is wearing disposable gloves to insert a needle into the patient's arm. He accidentally tears a glove during the task.



**When should Andy change his gloves? Select an option and select **SUBMIT**.**

- As soon as the ambulance reaches the hospital
- When he has handed the patient over
- As soon as possible



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Please try to answer the question above and then check the answer and the feedback on the following page.

> Topic 2: Putting on, taking off and changing PPE

## Changing PPE: Paramedics



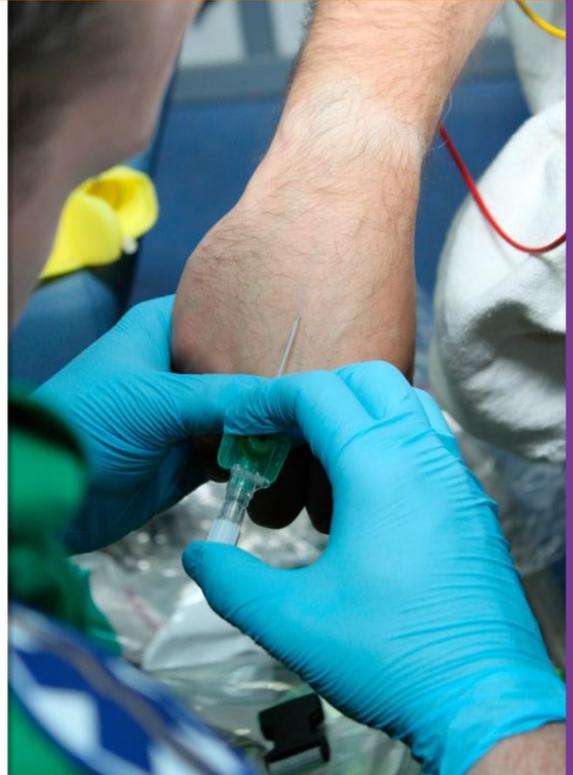
Andy is a paramedic working in an ambulance with a patient who is bleeding.

Andy is wearing disposable gloves to insert a needle into the patient's arm. He accidentally tears a glove during the task.



**When should Andy change his gloves? Select an option and select **SUBMIT**.**

- As soon as the ambulance reaches the hospital
- When he has handed the patient over
- As soon as possible



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## Correct



**That's correct.**

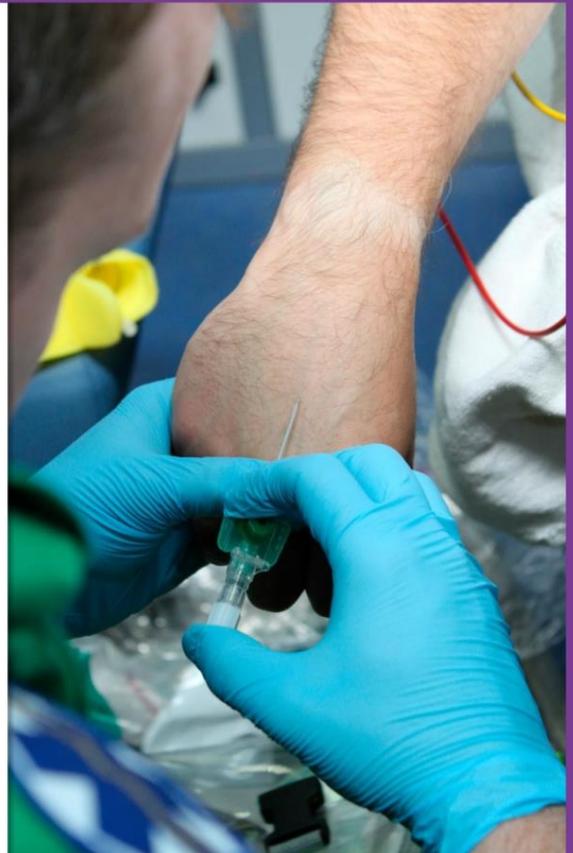
As the patient is bleeding, Andy still needs gloves.

He must change his gloves as soon as possible to protect himself from further exposure to the blood.

If Andy waits until the ambulance reaches the hospital or he has handed over the patient his hands will not have been protected from any micro-organisms in the blood which might get into any breaks in his skin.

The longer Andy keeps using the torn glove, the more the risk of a potential infection increases.

Continue >



< PREVIOUS SUBMIT

## Notes for Topic 2: Putting on, taking off and changing PPE



### Topic 3: Reporting PPE issues

**Your employer has a duty to protect you and you have the right to feel protected.**

But in some cases, you might have difficulty getting the right PPE, enough PPE to perform a task safely, or your PPE supplies might be of poor quality.

You'll now learn how to raise concerns about the supply and quality of PPE in your workplace. Discover what to do if you see poor practices.



Remember, you can use the **Menu** to jump to any screen or to check where you are in this topic.

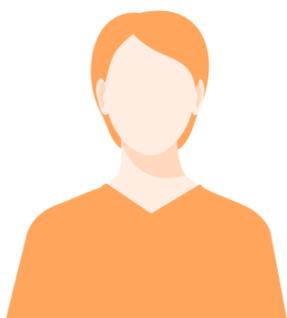
> Topic 3: Reporting PPE issues

# Supply and quality of PPE



Below are some issues health workers have reported.

“ I never have enough PPE! ”



“ I need goggles, not spectacles! ”



“ These aprons are paper thin! ”



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## ‘I never have enough PPE!’



“I’m a district nurse and I often treat leg ulcers and other wounds. I’m always running out of PPE. Sometimes I don’t wear PPE when I should just to make my supplies last longer.”



**If this nurse is failing to equip herself with enough PPE, she must:**

- review her PPE supply requirements at the start of every week
- top up her bag with extra supplies
- know where she can quickly pick up extra PPE when needed.



**If this nurse isn’t supplied with enough PPE she should:**

- discuss the problem with her line manager
- report the shortage to the person responsible for ordering PPE.



## ‘I need goggles instead of my spectacles for my job’



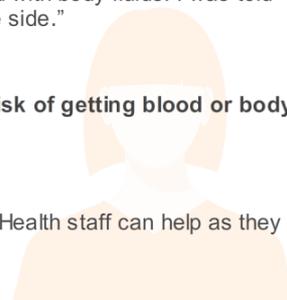
“I need my spectacles to see clearly. But where I work they’re often splashed with body fluids. I was told my spectacles act as PPE, but I’m scared my eyes will get splashed from the side.”



**Regular spectacles are not PPE. Anyone wearing spectacles is still at risk of getting blood or body fluid splashes into their eyes.**



This risk should be reported to a line manager. In some areas, Occupational Health staff can help as they have a responsibility to help protect employees at work.





"We used to have good, strong aprons that were fit for purpose. But recently we've been given thin aprons that tear easily. I have to keep changing them! I worry I'm not properly protected from infection".

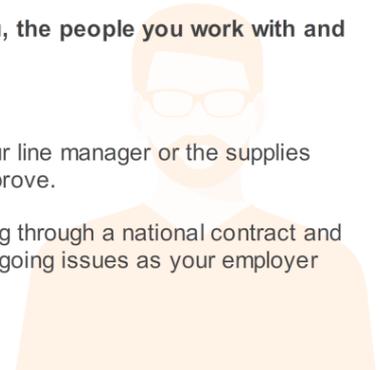


**Money and time are wasted if you have to use poor quality PPE. You, the people you work with and the people in your care may be put at risk of infection.**



Check if your colleagues have the same issue. Report the problem to your line manager or the supplies department. Remember, if you don't highlight the problem, nothing can improve.

Things might not change immediately, especially if the supplies are coming through a national contract and there are preferred suppliers. However, you should continue to report on-going issues as your employer has a duty to provide PPE that's fit for purpose.



## Reporting issues

Nobody comes to work to put people at risk of infection. But some staff do things not knowing they are putting others at risk.

So **if you see poor PPE practices**, you should try to tell the member of staff how to use PPE correctly. If you're not comfortable with that, you can report the issue to a senior colleague or your line manager.

**If you discover a lack of PPE or see poor quality products in use**, report this to your line manager or supplies department.

Remember – all patients and staff deserve the highest level of safe practice. If staff don't speak up, the issues are seen by the people we care for and that's not what you want.

**Now see what happens if the public spot bad practice that puts people we care for at risk.**



> Topic 3: Reporting PPE issues

# PPE – What the public says

Incorrect use of PPE can happen in all care settings. Members of the public often witness poor practice.



Read this real-life report from the [Patient Opinion website](#), then select the image to learn more.

## "Transmission of infection"

STORY HAS A RESPONSE



This story has had a response

Posted by [Julys3](#) (as a staff member), 2 years ago

Visiting a relative on a ward last week, I observed that the care assistant, although caring and pleasant, omitted to remove her gloves and apron after toileting a patient on a commode, before entering the results on the charts at the bottom of the bed with a pen from her uniform pocket.

So her pen was now a means of spreading any infection from patient to patient as the pen was returned to her uniform. The gloves and apron were then removed. It is likely that not only the pen was contaminated but so were the charts which she handled at the time as she had picked up toilet paper in the commode.



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### Notes for Topic 3: Reporting PPE issues

## Summary

Now that you've completed this module you'll be able to use choose, use and discard PPE correctly and confidently raise any concerns. Take a moment to review the key points of this module:

- Choose your PPE based on the infection risk associated with the task that you are undertaking.
- Consider all PPE as single use unless the manufacturer states it can be reused.
- PPE can become contaminated and can spread micro-organisms around.
- Always perform hand hygiene **before putting on** and **after removing** PPE.
- Putting on and removing PPE correctly protects you and others from infection.
- **Don't overuse PPE, especially gloves, as you might miss opportunities for hand hygiene.**

Remember, you can use the **Menu** to revisit any screen in this module.

## Next steps

Now you can put your learning into practice. Start with these examples:

- Read more about PPE in the National Infection Prevention and Control Manual.
- Reflect on how you put on and take off your PPE and see how you can improve.
- Act as a role model for others when choosing, using and discarding PPE.
- Know what your local procedure is for raising concerns about PPE.
- Think about your role and the tasks you undertake.



> Topic 3: Reporting PPE issues

## Feedback and assessment

Before you start the assessment, we'd like to get your feedback on this module.



Please complete the [Personal Protective Equipment \(PPE\) Questionnaire](#).

After you've answered the questionnaire, you must complete the assessment.



Copyright



Alternative formats



Please close this browser window to exit the module and then open the assessment.

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Feedback questionnaire link:

<https://response.questback.com/nhseducationforscotland/sipcep05PPE>

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Please close this browser window to exit the module and then open the assessment.

### Alternative formats



This resource may be made available, in full or in summary form, in alternative formats and community languages. Please contact NHS Education for Scotland on 0131 656 3200 or email [altformats@nes.scot.nhs.uk](mailto:altformats@nes.scot.nhs.uk) to discuss how we can best meet your requirements.

Transcriptions of any videos within this resource are available on request.



Please close this browser window to exit the module and then open the assessment.

## Printable learning resource – Completion Record

Learning outcomes:

- choose the appropriate PPE for **your** tasks
- put on and remove PPE correctly
- use and discard PPE correctly
- identify and report issues or raise concerns with the use, supply or quality of PPE where you work.

Anticipated learning time: 20 minutes

I confirm that I have completed the above module.

Learner name: .....

Learner role and location: .....

Learner signature .....



**Scottish Infection  
Prevention and Control  
Education Pathway**

*A route to excellence*

This resource may be made available, in full or summary form, in alternative formats and community languages. Please contact us on **0131 656 3200** or email **altformats@nes.scot.nhs.uk** to discuss how we can best meet your requirements.



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Westport 102  
West Port  
Edinburgh  
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