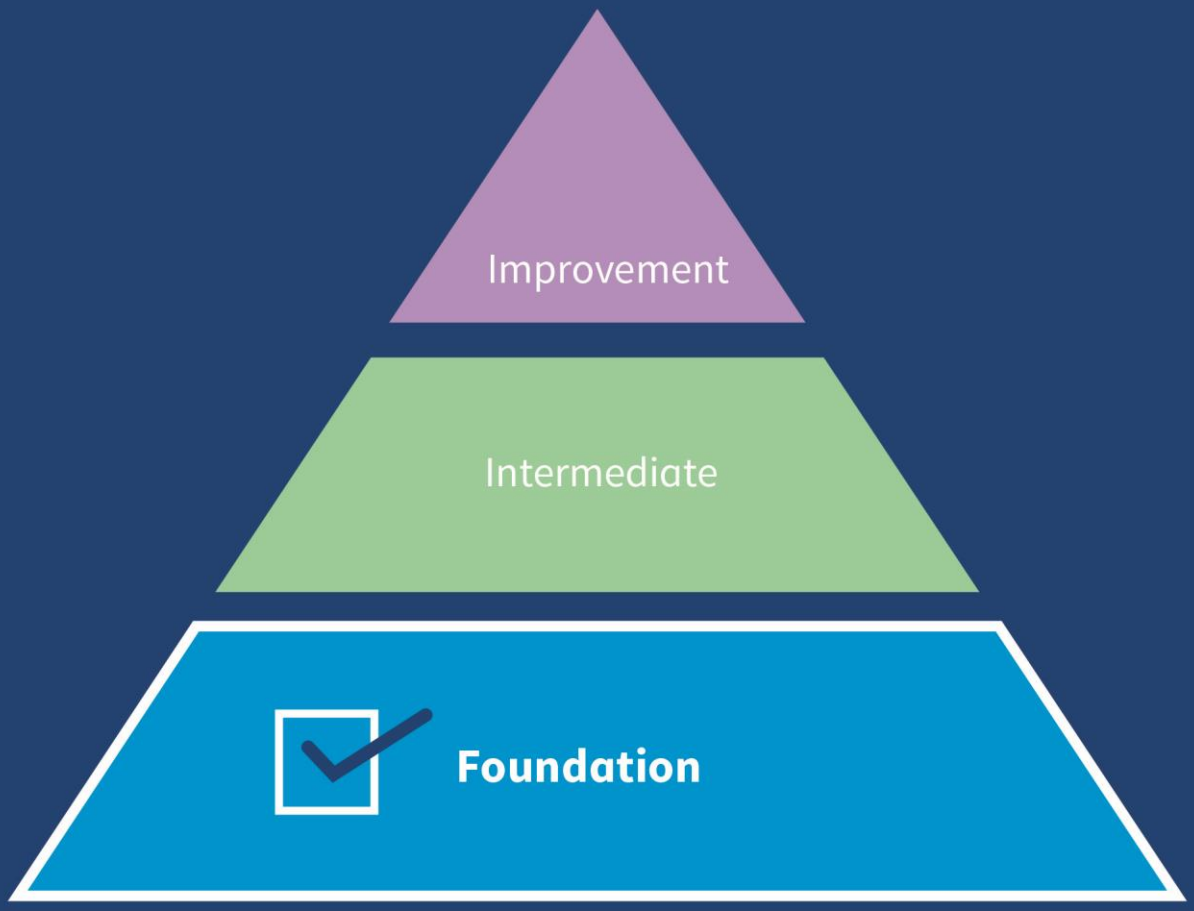
NHS Education for Scotland

Breaking the Chain of Infection

Scottish Infection Prevention and Control Education Pathway



Scottish Infection Prevention and Control Education Pathway

A route to excellence

Breaking the Chain of Infection

Printable learning resource

What is this resource?

This resource is based on the e-learning module “NES: Breaking the Chain of Infection” 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.

NHS Education for Scotland

Breaking the Chain of Infection

Scottish Infection Prevention and Control Education Pathway
A route to excellence

Learn how to navigate this module.

Start

Breaking the Chain of Infection

Menu Resources Glossary

Aim and learning outcomes

The **aim** of this module is to enable you to use the model of the Chain of Infection in practice to stop the spread of infection.

After completing this module, **you will be able to**:

- explain how micro-organisms spread using the Chain of Infection model
- recognise risk factors for infections
- identify actions to break the Chain of Infection.

Overview

There are three topics in this module.

Once you have visited **all of the screens** in this module, you will be able to access the separate assessment.

You will need to pass this assessment with an **80% pass mark** in order to get a certificate of completion.

Topic 1:
The Chain of Infection – how does it work? (7 minutes)

Topic 2:
Taking actions to reduce infection – Standard Infection Control Precautions (7 minutes)

Topic 3:
What you need to do – in practice (16 minutes)

This module will take you about **30 minutes** to complete.

‹ PREV NEXT ›

Topic 1: The Chain of Infection – how does it work?

In this topic, you will learn how infection spreads using the Chain of Infection.

First, let us look at an example of how the flu virus can easily spread to others in your care. Select **NEXT** to continue.

‹ PREV NEXT ›

Henry has the flu

Henry Carson, aged 65, has the flu.

He coughs and sneezes virus droplets into his hands, contaminating them. He always forgets to wash his hands afterwards.

Breaking the Chain of Infection

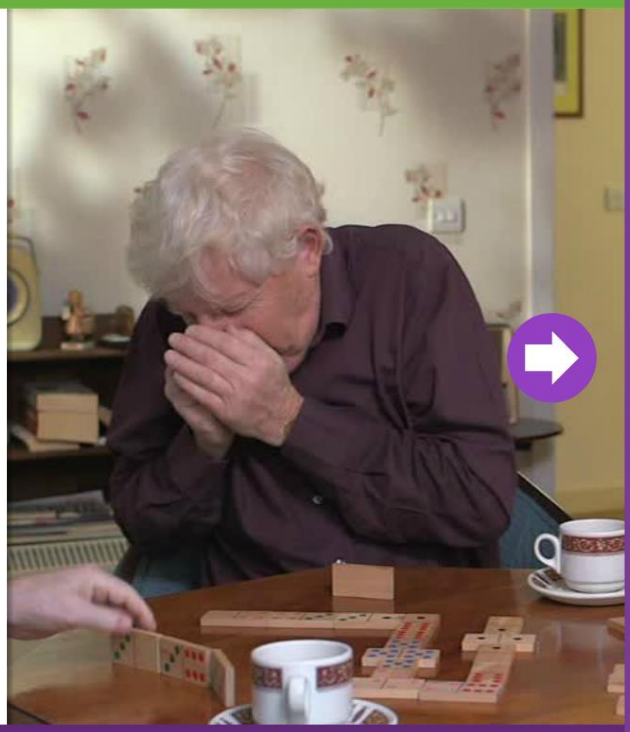
Menu Resources Glossary

Topic 1: The Chain of Infection – how does it work?

Henry has the flu

Henry touches your hands and the virus is now spread to you.

You also forget to wash your hands and spread the flu virus by touching objects and people around you.



Henry has the flu

Henry spends time with his elderly friends, who are at risk of flu. They breathe in the virus when he coughs and sneezes. Soon, they too develop flu symptoms.

The flu virus spreads easily. Let us now take a closer look at how easily it spreads using the Chain of Infection. Select **NEXT** to continue.

The Chain of Infection

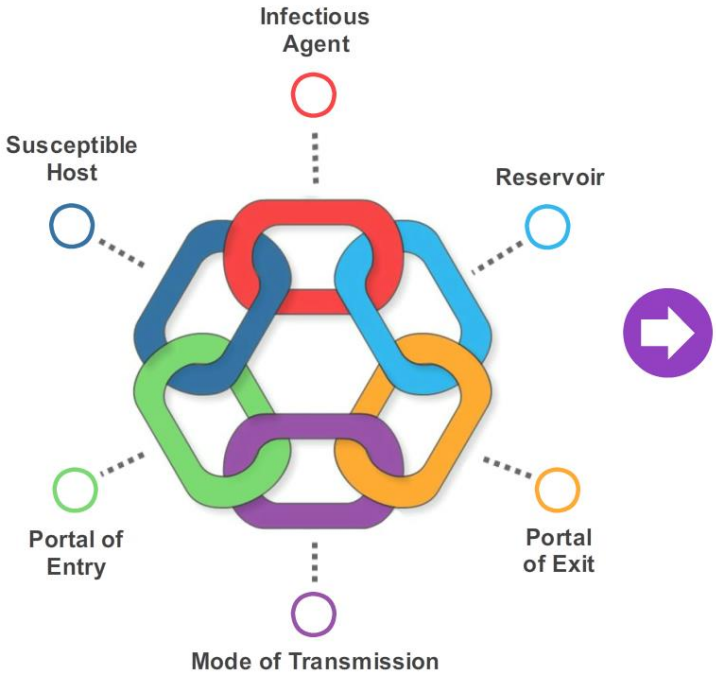
The Chain of Infection is a model commonly used to show how infection spreads. You can stop an infection spreading by breaking one or more of the links in the chain.

The links are the:

- Infectious Agent
- Reservoir
- Portal of Exit
- Mode of Transmission
- Portal of Entry
- Susceptible Host.

Let us take a closer look at each link, and discover how the flu virus spread from Henry to other people.

Select the arrow to explore each link.



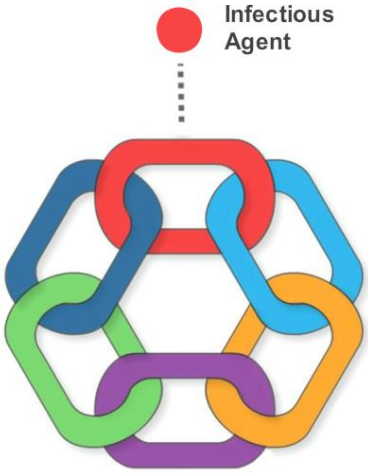
Infectious Agent

The **Infectious Agent** is any micro-organism capable of causing an infection, commonly:

- bacteria
- viruses
- fungi.

Henry has the flu

The **Infectious Agent** was the flu virus.



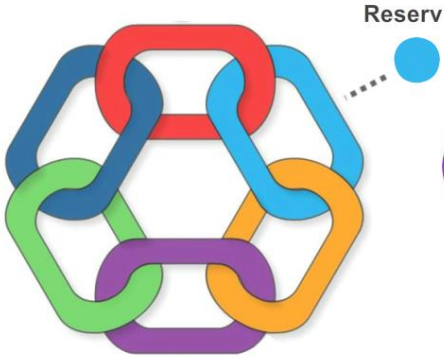
Reservoir

The **Reservoir** is where the **Infectious Agent** normally lives and multiplies. This can be in or on:

- humans
- equipment
- the environment
- food
- animals.

Henry has the flu

The flu virus lived in Henry's respiratory tract (the Reservoir).



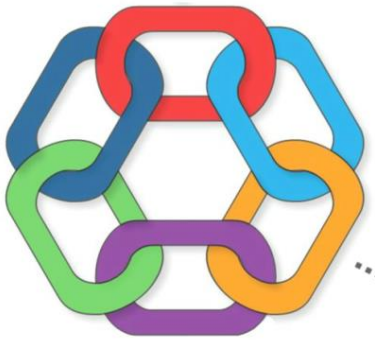
Portal of Exit

The **Portal of Exit** is how the **Infectious Agent** leaves the **Reservoir**, commonly through:

- blood and other body fluids
- skin scales
- coughing and sneezing.

Henry has the flu

The flu virus exited from Henry through his mouth and nose when he coughed and sneezed.



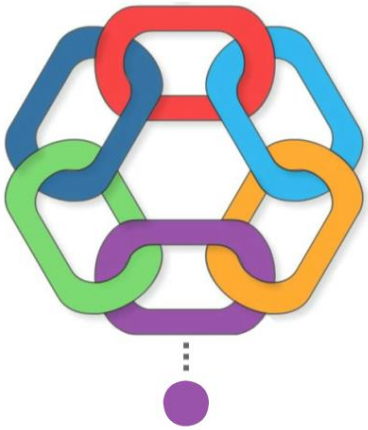
Mode of Transmission

The **Mode of Transmission** is how the **Infectious Agent** is spread from one site to another, including through:

- direct physical contact
- contaminated objects
- the air
- contact with blood or body fluids
- ingestion of contaminated food or water
- insects or animals.

Henry has the flu

The flu virus spread to other people when Henry coughed and sneezed. It spread through the air and through physical contact when he touched their hands.



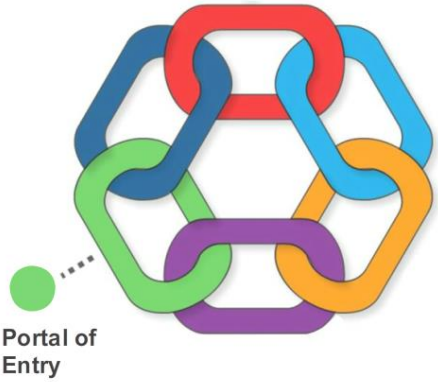
Portal of Entry

The **Portal of Entry** is how the **Infectious Agent** enters the body, including through:

- open or surgical wounds
- broken skin
- eyes or mouth
- the respiratory tract
- intestinal tract (ingestion)
- tubes inserted into the body (urinary catheters, drips, feeding tubes).

Henry has the flu

The flu virus entered other people when they touched their mouth with their contaminated hands. It also entered through their respiratory tract when they breathed in flu virus droplets.



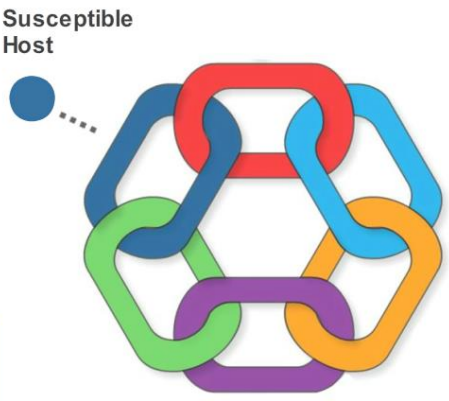
Susceptible Host

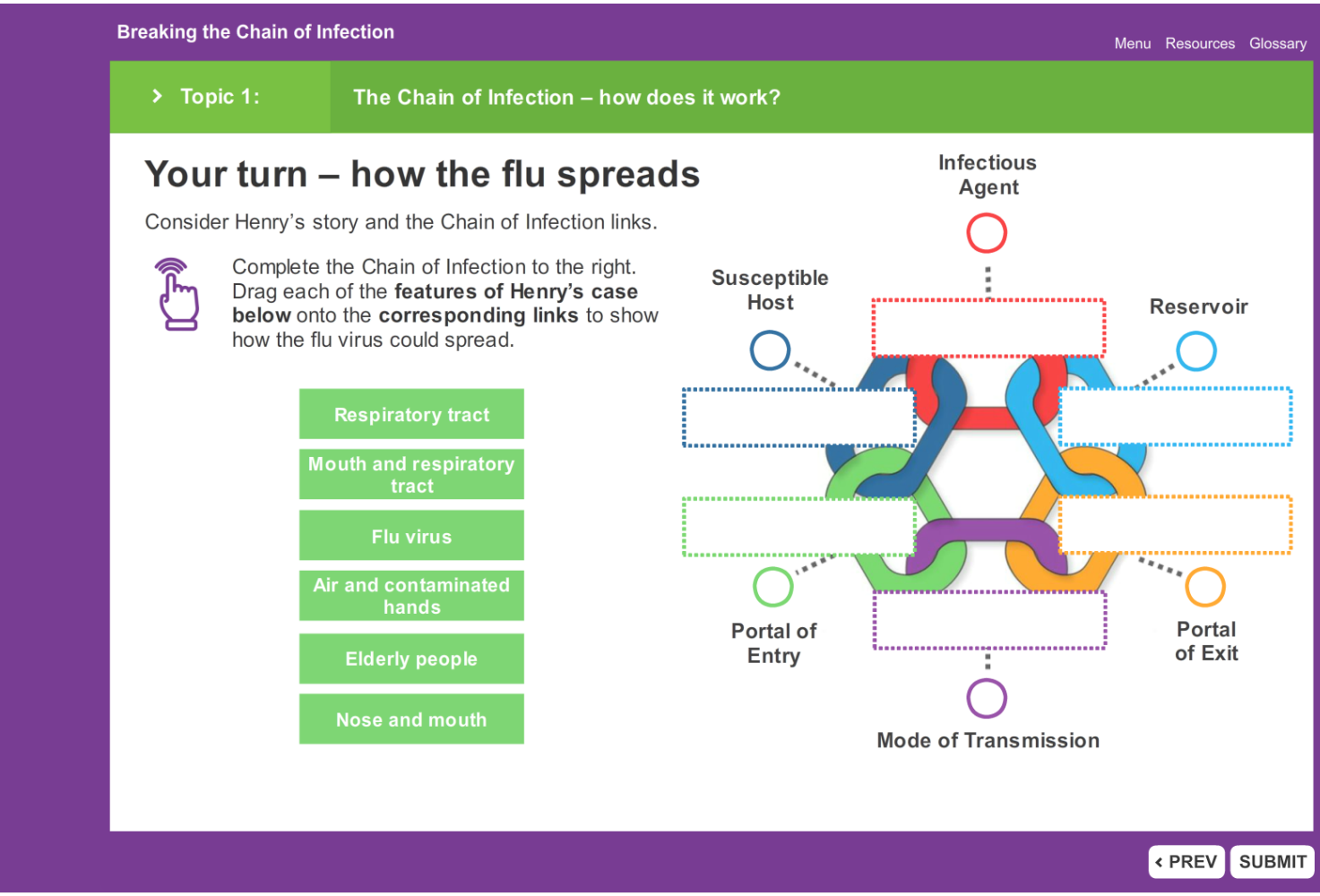
The **Susceptible Host** is a person who is at risk of infection because they are unable to fight the infection, due to:

- an underdeveloped immune system (such as a very young person)
- a decreasing immune system (such as an elderly person)
- drugs or diseases that lower their defences against infections
- breaks in the skin
- tubes inserted into the body (urinary catheters, drips, feeding tubes).

Henry has the flu

The Susceptible Hosts were Henry's elderly friends because they had decreasing immune systems.





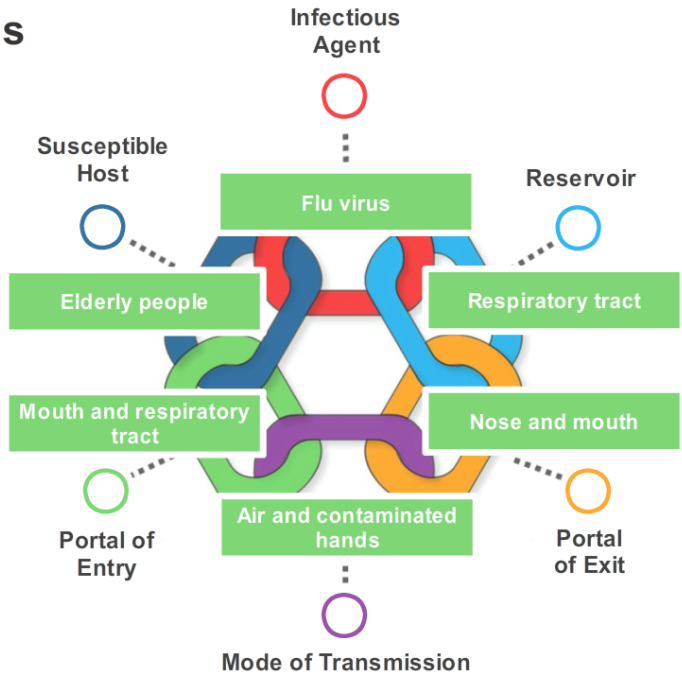
Please fill in the boxes with the correct items and then check the answer and the feedback on the following page.

Topic 1: The Chain of Infection – how does it work?

Your turn – how the flu spreads

Consider Henry's story and the Chain of Infection links.

Complete the Chain of Infection to the right. Drag each of the **features of Henry's case below** onto the **corresponding links** to show how the flu virus could spread.



PREV SUBMIT

Correct

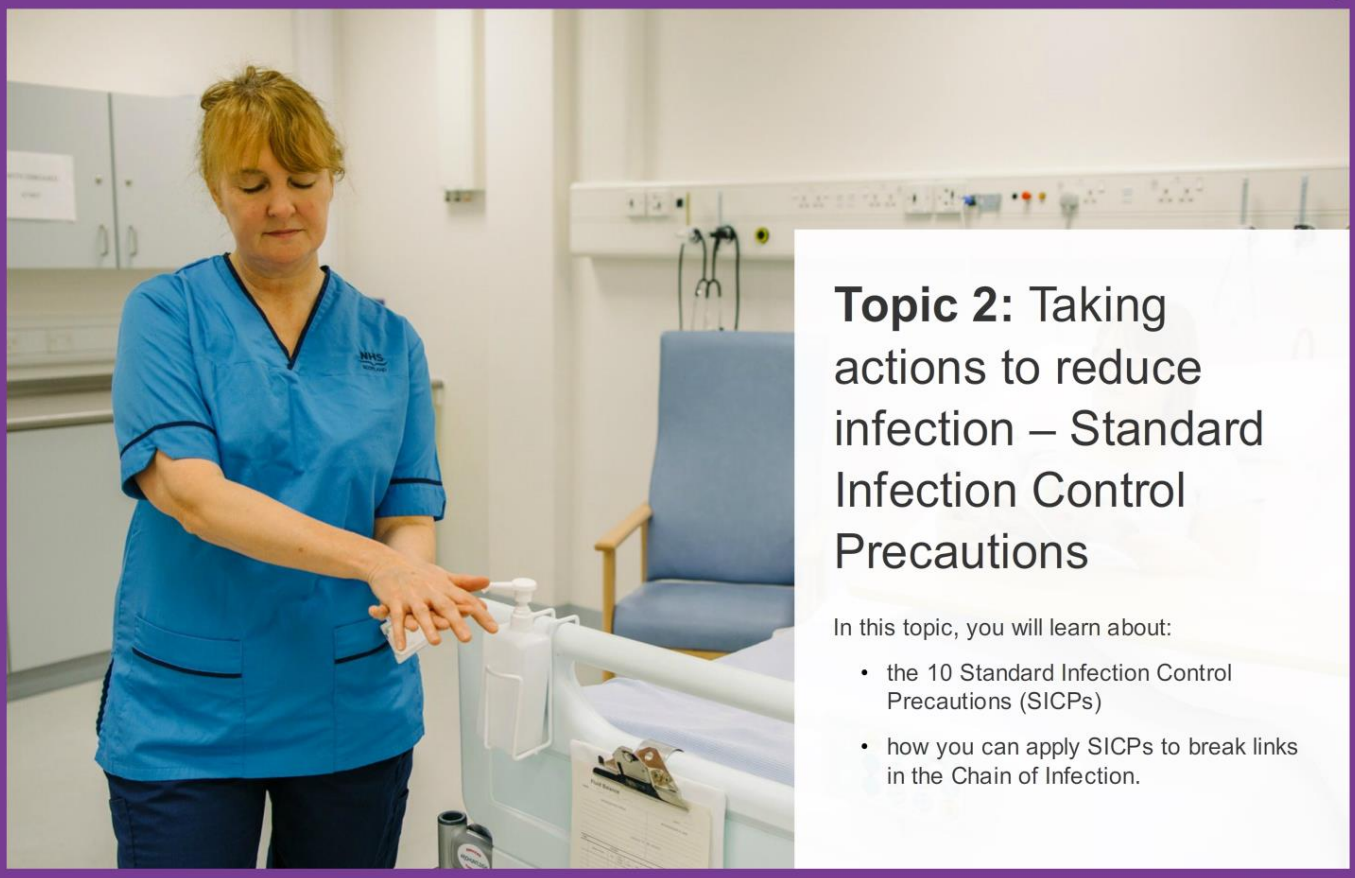
That's correct.

Links	Flu virus
Infectious Agent	Flu virus
Reservoir	Respiratory tract
Portal of Exit	Nose and mouth
Mode of Transmission	Air and contaminated hands
Portal of Entry	Mouth and respiratory tract
Susceptible Host	Elderly people

Continue

SUBMIT

Notes for Topic 1: The Chain of Infection – How does it work?



Topic 2: Taking actions to reduce infection – Standard Infection Control Precautions

In this topic, you will learn about:

- the 10 Standard Infection Control Precautions (SICPs)
- how you can apply SICPs to break links in the Chain of Infection.

‹ PREV NEXT ›

Standard Infection Control Precautions (SICPs)

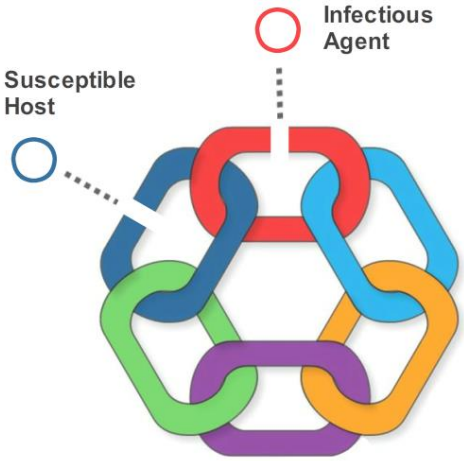
SICPs are the 10 basic measures necessary to prevent infections in the workplace. **We use SICPs to break the Chain of Infection links**.

Select **NEXT** to explore all 10 SICPs.

‹ PREV NEXT ›

1. Patient placement / Assessment for infection risk

This is the ongoing assessment of people and their environment for risk of infection.



The objective is to isolate the Infectious Agent and those at risk. This breaks the **Infectious Agent** and **Susceptible Host** links.

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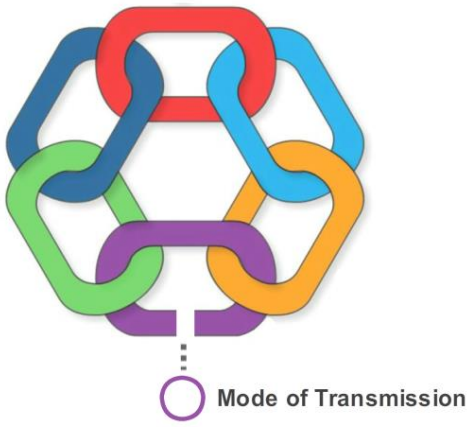
› Topic 2: Taking actions to reduce infection – Standard Infection Control Precautions

2. Hand hygiene

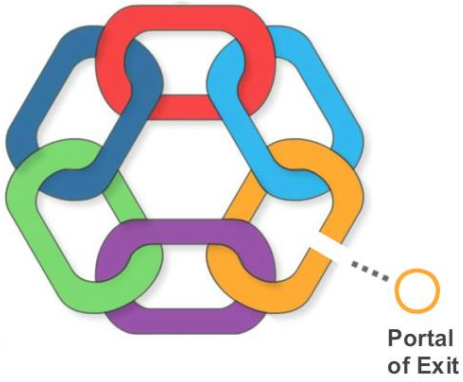
Hand washing or the use of Alcohol Based Hand Rubs remove Infectious Agents.



The objective is to prevent micro-organisms spreading via our hands. This breaks the **Mode of Transmission** link.

3. Respiratory and cough hygiene

Containing respiratory secretions reduces the risk of infecting others.



The objective is to target the place where micro-organisms leave the body. This breaks the **Portal of Exit** link.

Breaking the Chain of Infection

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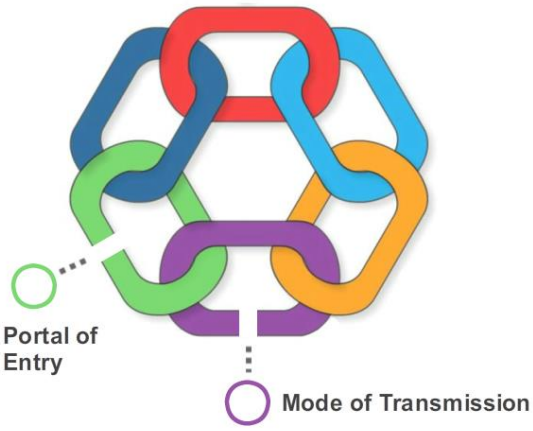
Topic 2: Taking actions to reduce infection – Standard Infection Control Precautions

4. Personal Protective Equipment (PPE)

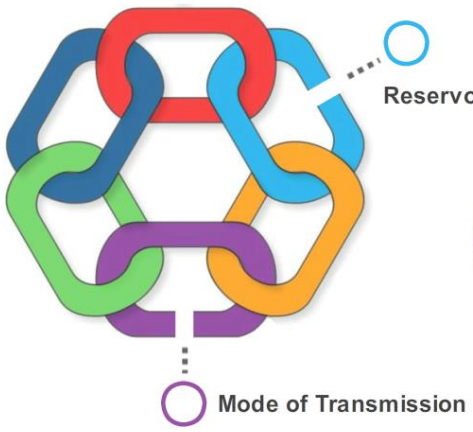
Involves the use of PPE depending on the procedure you are carrying out. Examples include disposable gloves, disposable aprons/gowns, eye/face protection, headwear and footwear.



The objective is to prevent micro-organisms from spreading and entering the body. This breaks the **Mode of Transmission** and **Portal of Entry** links.

5. Safe management of care equipment

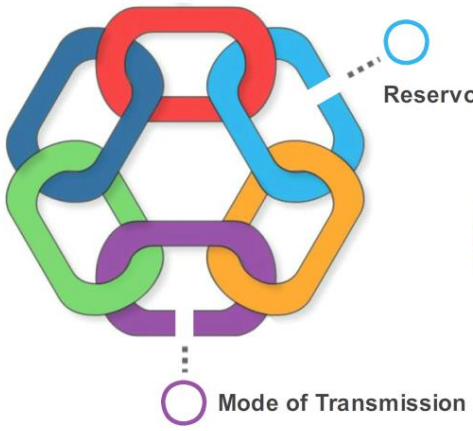
Maintain safe and clean equipment.



The objective is to prevent micro-organisms being transmitted through shared equipment during care delivery. This breaks the **Reservoir** and **Mode of Transmission** links.

6. Safe management of the care environment

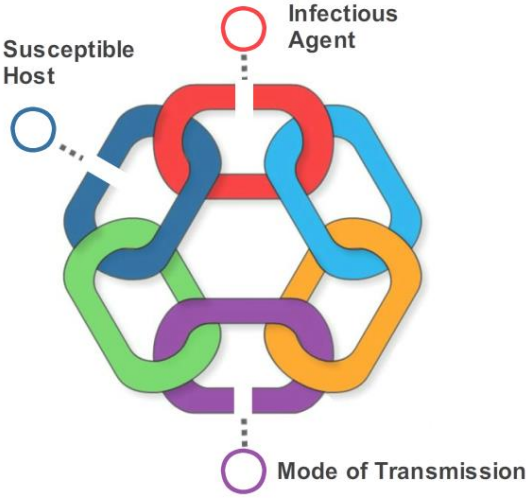
Keep the care environment clean and tidy.



The objective is to keep the environment visibly and physically clean to prevent micro-organisms from spreading. This breaks the **Reservoir** and **Mode of Transmission** links.

7. Safe management of linen

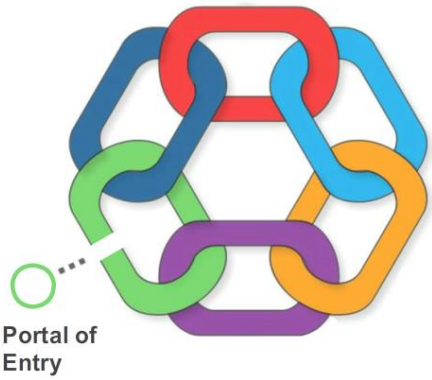
This involves careful segregation and management of linen.



The objective is to protect others from micro-organisms on used linen, including those handling the linen and people being cared for. This breaks the **Infectious Agent**, **Mode of Transmission** and **Susceptible Host** links.

8. Safe management of blood and body fluid spillages

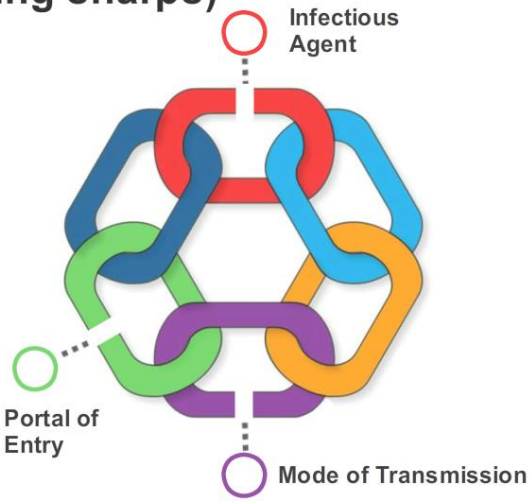
This involves the safe management of spillages of blood or body fluids, for example urine.



The objective is to provide protection against micro-organisms in spillages from entering your body. This breaks the **Portal of Entry** link.

9. Safe disposal of waste (including sharps)

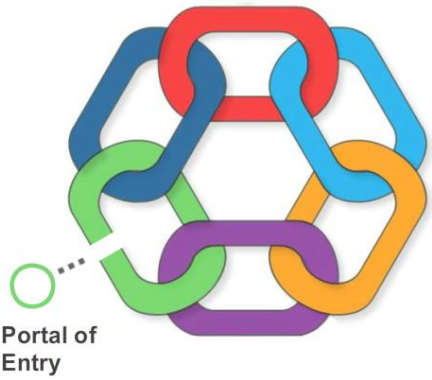
This involves the safe segregation and disposal of waste, including sharps.



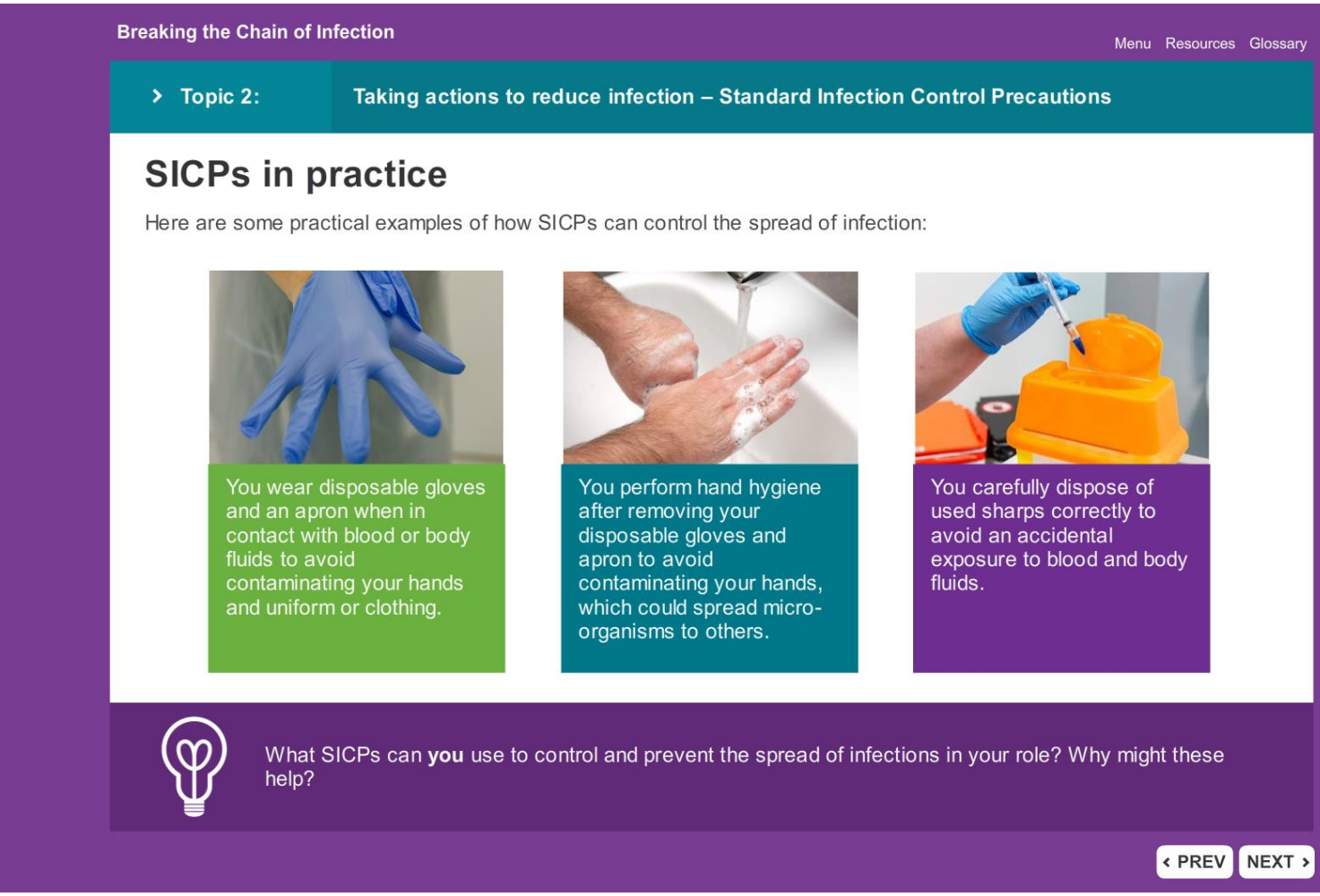
The objective is to contain micro-organisms (and to prevent sharps injuries). This breaks the **Portal of Entry**, **Mode of Transmission** and **Infectious Agent** links.

10. Occupational safety: prevention and exposure management (including sharps)

This is first aid treatment following accidental exposure to blood or body fluids.



The objective is protect against micro-organisms from entering your body. This breaks the **Portal of Entry** link.



Notes for Topic 2: Taking actions to reduce infection - Standard Infection Control Precautions

Topic 3: What you need to do – in practice

You use SICPs to reduce the spread of infection following an assessment of the risks to you and the people you care for.

In this topic, you will learn about:

- identifying and assessing infection risks
- the actions, including which SICPs, you would use to reduce the spread of infection.

Let us first take a closer look at your role. Select **NEXT**.

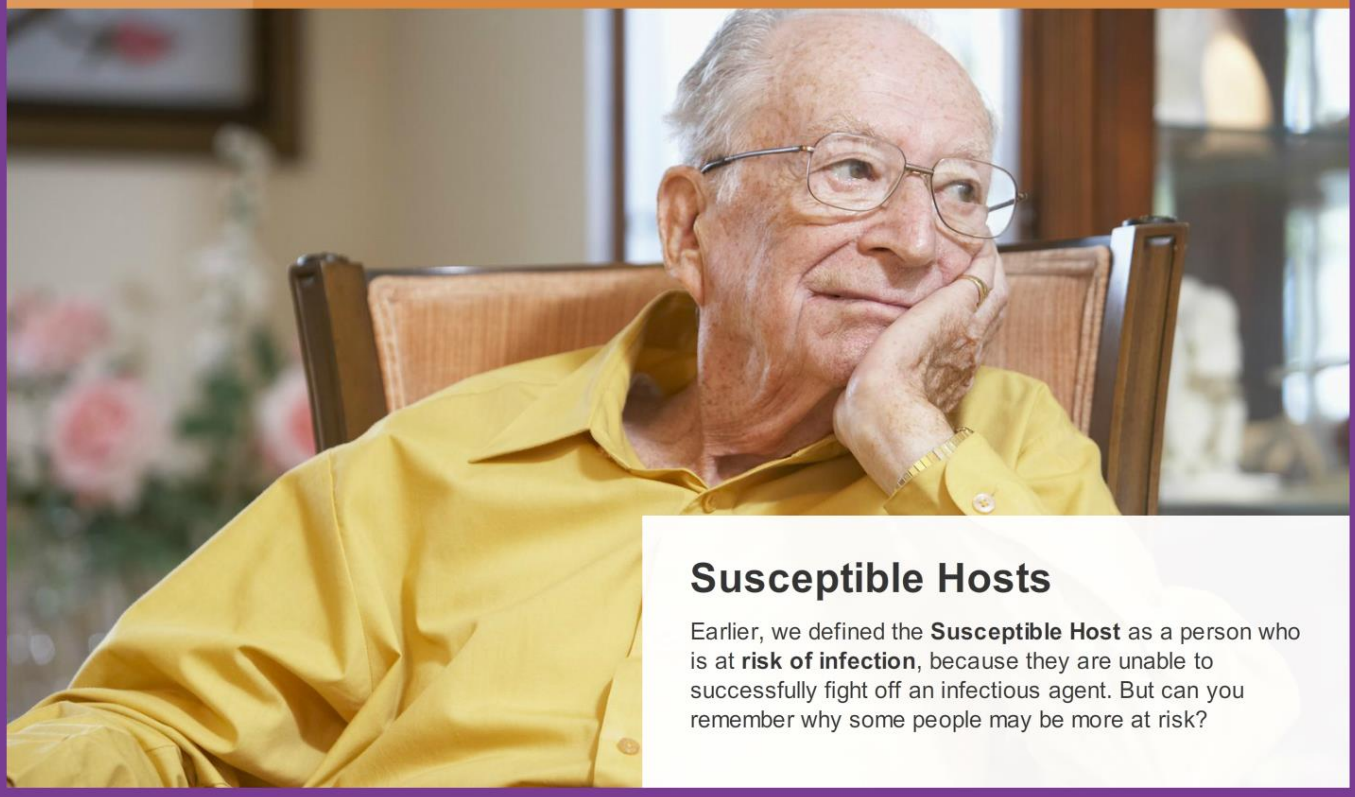
‹ PREV NEXT ›

What do you need to do?

To reduce the spread of infections, your role is to:

1. Identify the **risk** of infection to people where you deliver care on an ongoing basis.
2. Work out what is **causing** the risk.
3. Identify and apply **actions** you can take to reduce the risk, i.e. apply SICPs.
4. Assess if your actions are **working**.

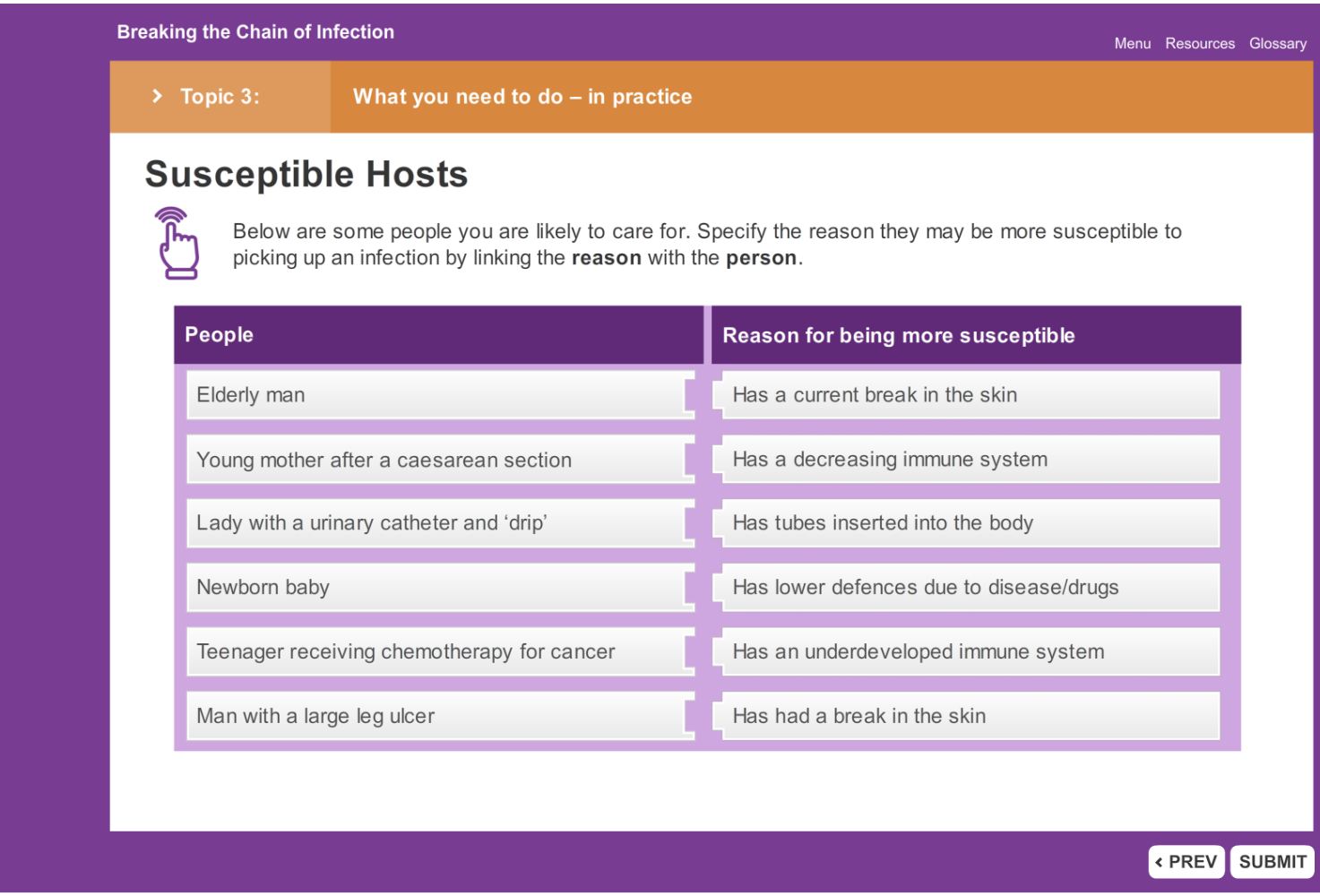
‹ PREV NEXT ›



Susceptible Hosts

Earlier, we defined the **Susceptible Host** as a person who is at **risk of infection**, because they are unable to successfully fight off an infectious agent. But can you remember why some people may be more at risk?

‹ PREV NEXT ›



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.

Susceptible Hosts

Below are some people you are likely to care for. Specify the reason they may be more susceptible to picking up an infection by linking the **reason** with the **person**.

People	Reason for being more susceptible
Elderly man	Has a decreasing immune system
Young mother after a caesarean section	Has had a break in the skin
Lady with a urinary catheter and 'drip'	Has tubes inserted into the body
Newborn baby	Has an underdeveloped immune system
Teenager receiving chemotherapy for cancer	Has lower defences due to disease/drugs
Man with a large leg ulcer	Has a current break in the skin

‹ PREV SUBMIT

Correct

That's correct.

The **elderly man** and the **newborn** have a reduced immune system due to extremes of age.

The **young mother who has just had the caesarean section** and the **man with the large leg ulcer** both have breaks in the skin. Note that intact skin protects the body from infection.

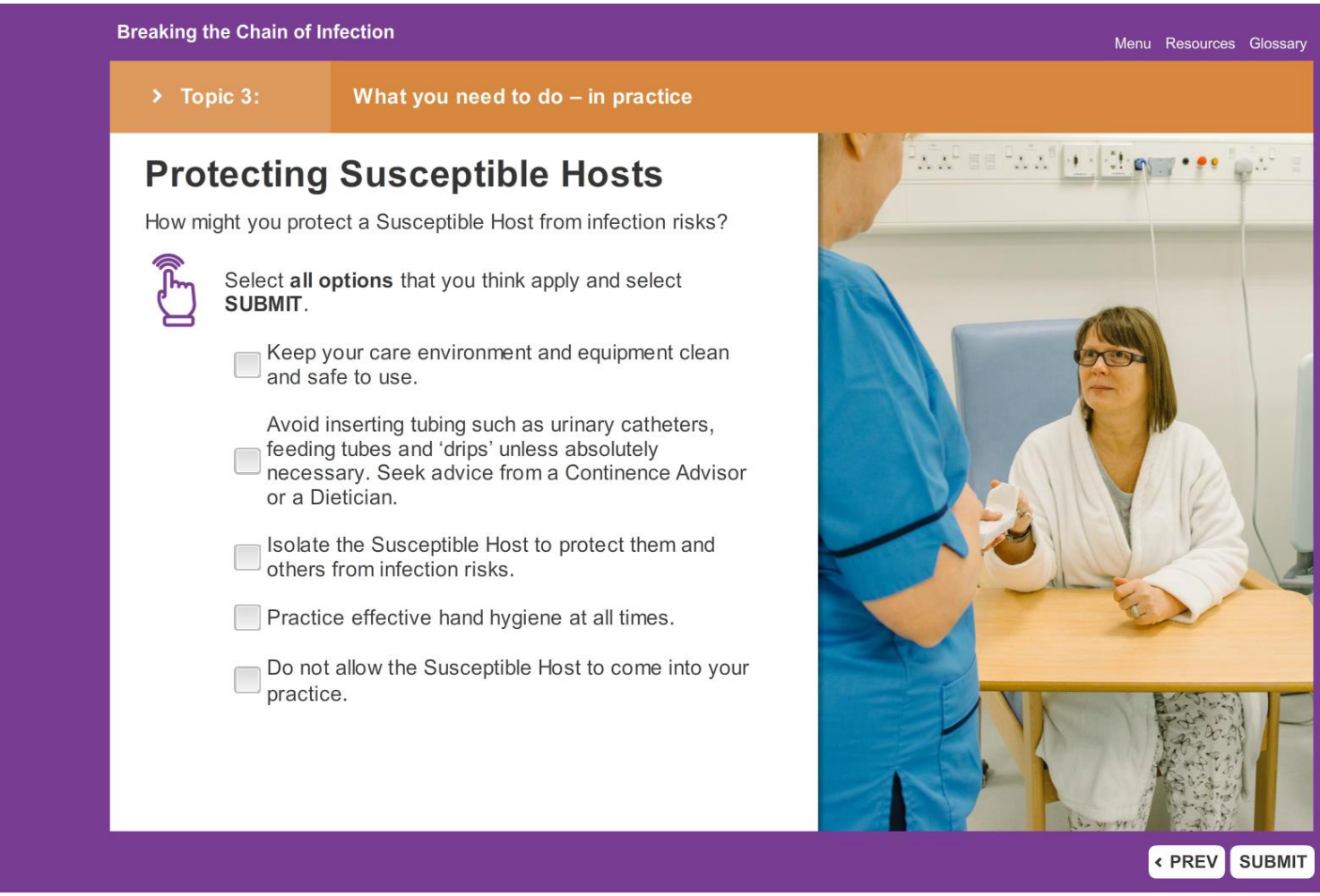
The **lady with a urinary catheter and 'drip'** has tubes inserted into the body, which provide additional entry points for micro-organisms.

The **teenager receiving chemotherapy for cancer** has a disease and is taking drugs, which both lower defences against infections.

As you can see, it is not just the elderly and the very young who are susceptible to infection. Those considered young and fit may also be Susceptible Hosts.

Continue ›

SUBMIT



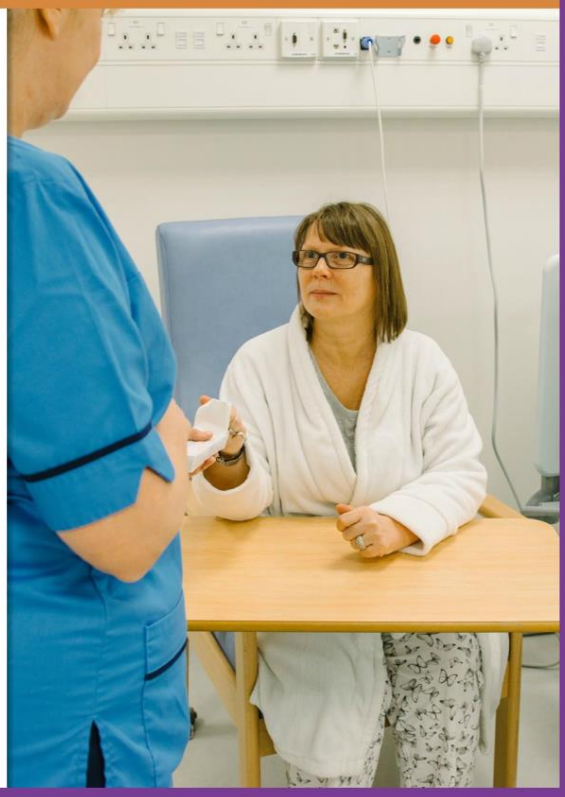
Please try to answer the question above and then check the answer and the feedback on the following page.

Protecting Susceptible Hosts

How might you protect a Susceptible Host from infection risks?

Select **all options** that you think apply and select **SUBMIT**.

- [x] Keep your care environment and equipment clean and safe to use.
- [x] Avoid inserting tubing such as urinary catheters, feeding tubes and 'drips' unless absolutely necessary. Seek advice from a Continence Advisor or a Dietician.
- [x] Isolate the Susceptible Host to protect them and others from infection risks.
- [x] Practice effective hand hygiene at all times.
- [ ] Do not allow the Susceptible Host to come into your practice.



‹ PREV SUBMIT

Breaking the Chain of Infection

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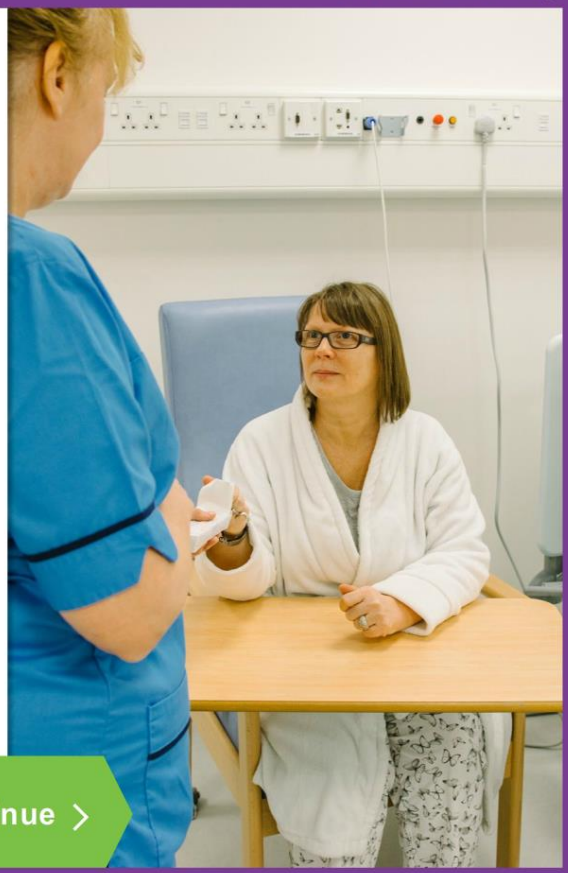
Correct

That's correct. All those options applied. You can also:

- encourage the Susceptible Host to get a vaccination for the flu and other infections
- keep open wounds covered and protect them from environmental contamination
- regularly review your infection risk assessment as situations might change, such as a urinary catheter being removed.



Continue ›

SUBMIT

Stories at work

Now, let us look at the other links in the Chain of Infection. On the following screens, there are four stories or situations you could experience at work. In each story, the person is either **at risk** of an infection or **has** an infection. You will be asked to **identify or evaluate the level of risk** for spreading the infection to other people and what you might **do** to reduce the risk of spreading the infection.

Reservoir	Portal of Exit	Mode of Transmission	Portal of Entry
Harry develops a *Pseudomonas aeruginosa* infection in his pressure ulcer.	Brian has a cold.	William has *Clostridium difficile.*	Callum is at risk of a blood borne virus.

Select **NEXT** to start with Harry's story.

The stories are based in different settings, but the learning applies to all settings.

Breaking the Chain of Infection

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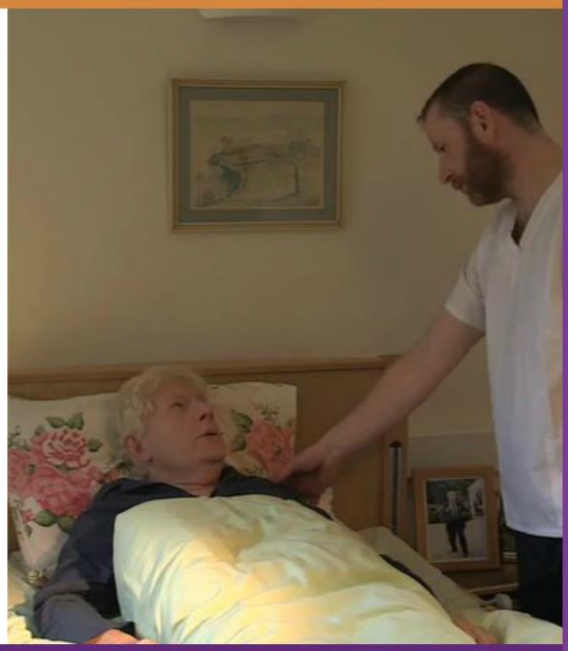
› Topic 3: What you need to do – in practice

Harry develops a *Pseudomonas aeruginosa* infection

Harry, aged 70, lives in a care home and is immobile. He has a chronic, open, clean pressure ulcer which is healing well.

While Harry is being attended by John, his Care Assistant, water from a vase of flowers by his bedside accidentally spills, splashing water onto the bed and into the pressure ulcer.

Harry develops a *Pseudomonas aeruginosa* infection in his pressure ulcer.



Take a moment to **stop and think** about what caused Harry's infection.

‹ PREV NEXT ›

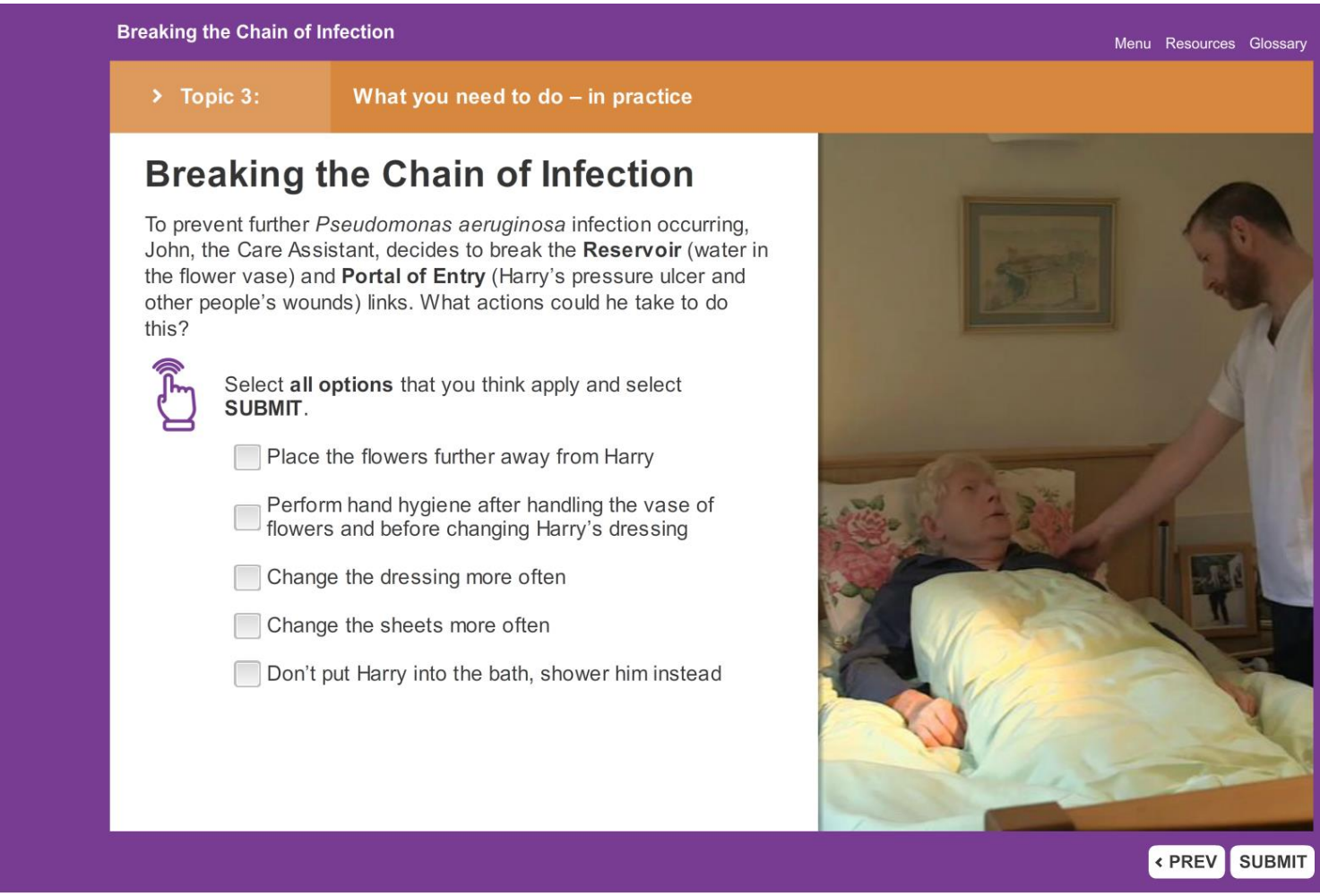
The Reservoir in focus

Pseudomonas aeruginosa takes advantage of weakened immune systems, causing infections. It thrives in moist conditions (**Reservoir**), especially in water where it thrives indefinitely.

Below are other examples of where you might find *Pseudomonas aeruginosa:*

Sinks	Poorly maintained hot tubs or baths	Nebulisers
Mops steeping in water	Plastic washing bowls	Re-usable dishcloths

Where else do you think you might find *Pseudomonas aeruginosa*? Where might it be in your workplace?



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

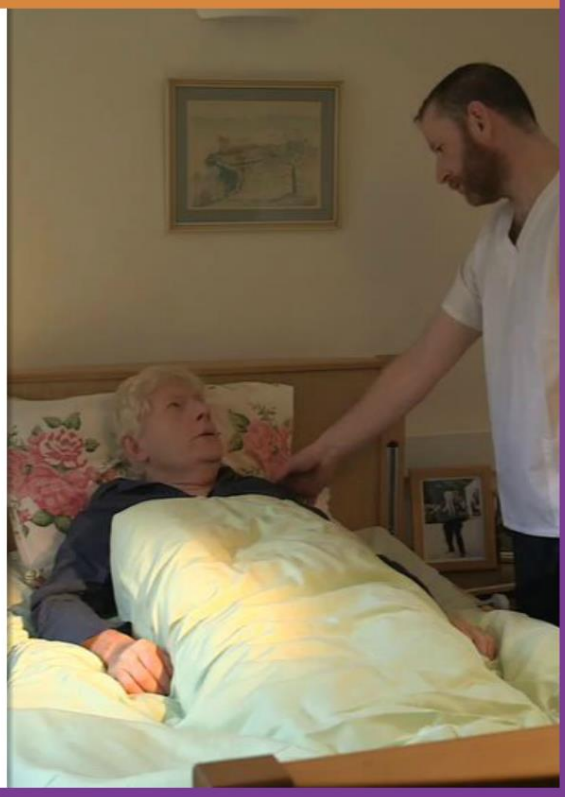
> Topic 3: What you need to do – in practice

Breaking the Chain of Infection

To prevent further *Pseudomonas aeruginosa* infection occurring, John, the Care Assistant, decides to break the **Reservoir** (water in the flower vase) and **Portal of Entry** (Harry's pressure ulcer and other people's wounds) links. What actions could he take to do this?

Select **all options** that you think apply and select **SUBMIT**.

- [x] Place the flowers further away from Harry
- [x] Perform hand hygiene after handling the vase of flowers and before changing Harry's dressing
- [ ] Change the dressing more often
- [ ] Change the sheets more often
- [x] Don't put Harry into the bath, shower him instead



< PREV SUBMIT

Correct

That's correct. It is important to:

- place the flowers further away from Harry, so as not to introduce further infection into the pressure ulcer
- perform hand hygiene after handling the vase of flowers and before changing Harry's dressing so as not to transmit infection into the pressure ulcer
- not put Harry into the bath, shower him instead. The shower is more hygienic for people with broken areas of skin, like Harry. Also, *Pseudomonas aeruginosa* will thrive in the moist environment of a bath which other people will sit in.

It is important not to empty the vase into the sink as it will splash *Pseudomonas aeruginosa* into an area where hands are being washed.

Continue >

SUBMIT

Brian has a cold

Brian is a Care Worker who develops a cold after visiting his poorly mother. While providing care for Maggie, an elderly lady living at home, he coughs and sneezes around her.

Maggie later develops a cold and then a chest infection.

The cold in focus
Earlier, we looked at how the flu virus spreads. The cold virus spreads in a similar way. When a person coughs or sneezes, the cold virus is sprayed into the air and environment.

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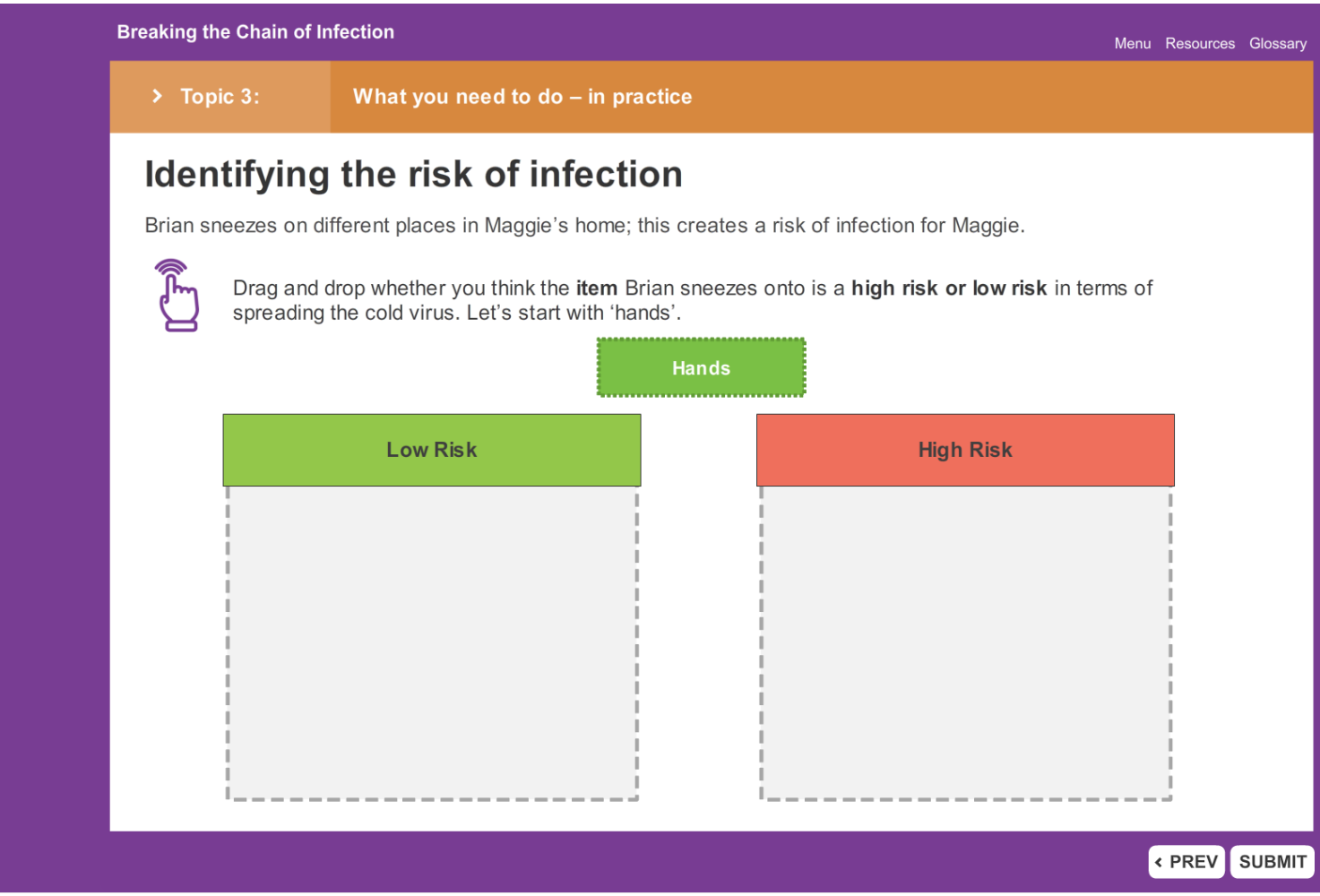


Please fill in the boxes with the correct items and then check the answer and the feedback on the following page.

Bedside table	Bed linen	Toilet
Uncovered food beside Maggie	Walls	Floor
Hands	Used hankies lying around	Sink

Identifying the risk of infection

Brian sneezes on different places in Maggie's home; this creates a risk of infection for Maggie.

Drag and drop whether you think the **item** Brian sneezes onto is a **high risk or low risk** in terms of spreading the cold virus. Let's start with 'hands'.

Low Risk	High Risk
Toilet	Hands
Walls	Bedside table
Sink	Used hankies lying around
Floor	Uncovered food beside Maggie
	Bed linen

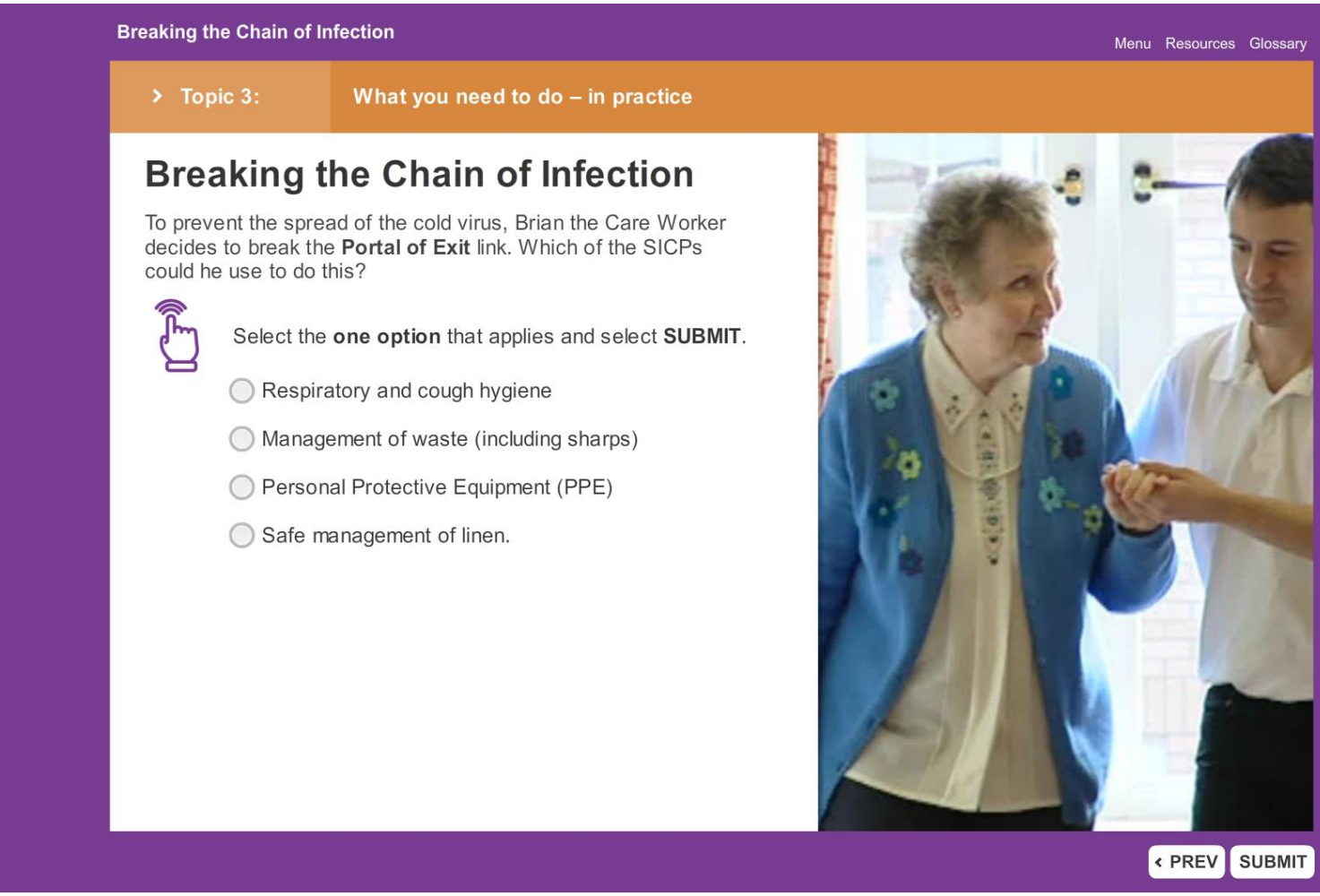
Correct

That's correct. You selected the following answers:

Low Risk	High Risk
Toilet	Hands
Floor	Bedside table
Walls	Used hankies lying around
Sink	Uncovered food beside Maggie
	Bed linen

The high risk items are items that are frequently touched and are surrounding Maggie.

Continue



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

Breaking the Chain of Infection

To prevent the spread of the cold virus, Brian the Care Worker decides to break the **Portal of Exit** link. Which of the SICPs could he use to do this?

Select the **one option** that applies and select **SUBMIT**.

- (●) Respiratory and cough hygiene
- ( ) Management of waste (including sharps)
- ( ) Personal Protective Equipment (PPE)
- ( ) Safe management of linen.

‹ PREV SUBMIT

Correct

That's correct.

By applying the **respiratory and cough hygiene** SICP, Brian needs to cover his mouth and nose (**Portal of Exit**) when coughing or sneezing, and dispose of all used tissues promptly into the bin.

He also needs to make Maggie and anyone else he cares for aware of this good practice.

Continue ›

SUBMIT

William has *Clostridium difficile*

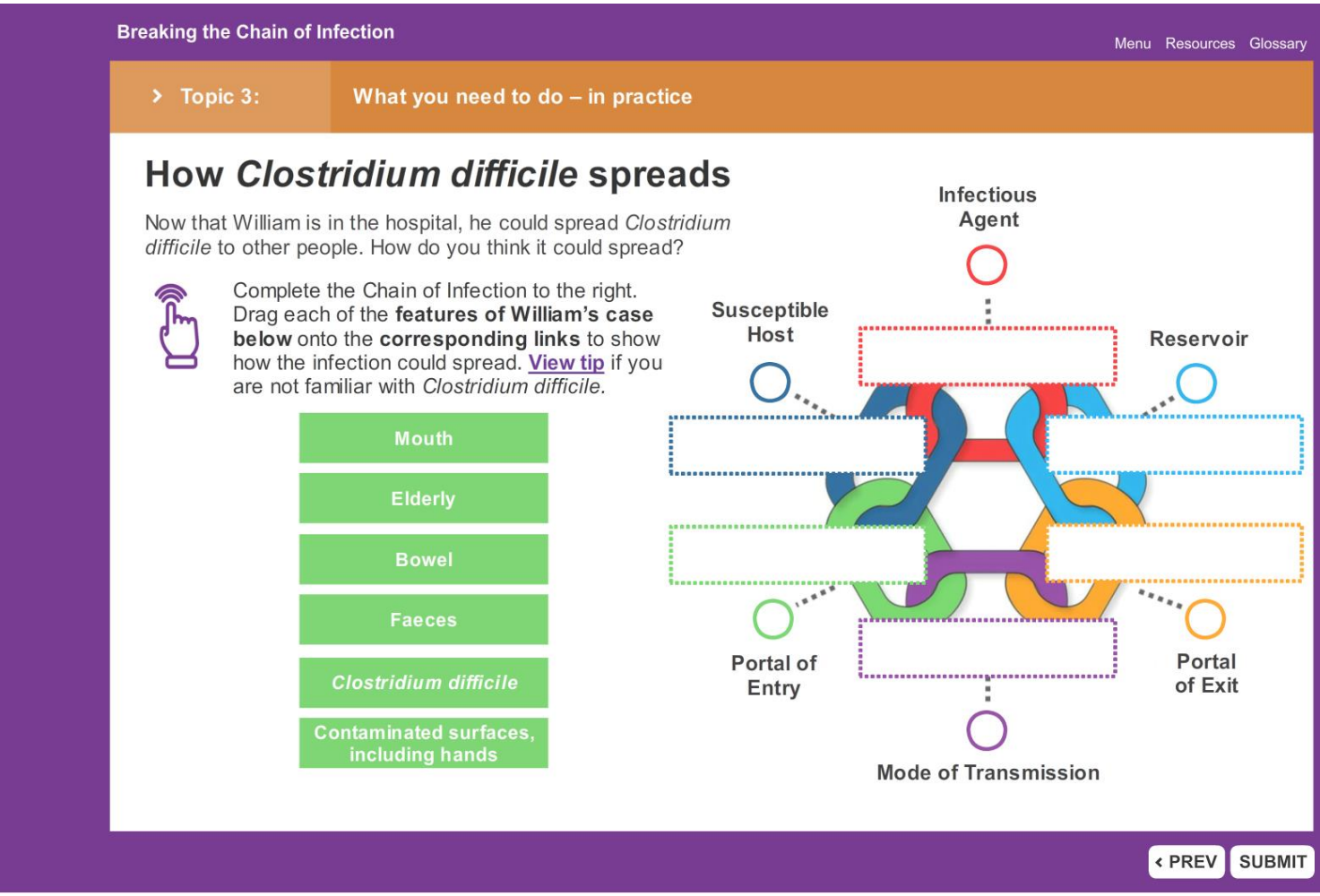
William, aged 72, was prescribed repeated antibiotics from his GP for a chest infection. William developed diarrhoea at home and was diagnosed with *Clostridium difficile* infection. He was admitted to the hospital for further care, and is being attended by his Nurse, Marie, and other care staff.

***Clostridium difficile* in focus**
Before we continue, let us **stop and think** about what caused William's infection.

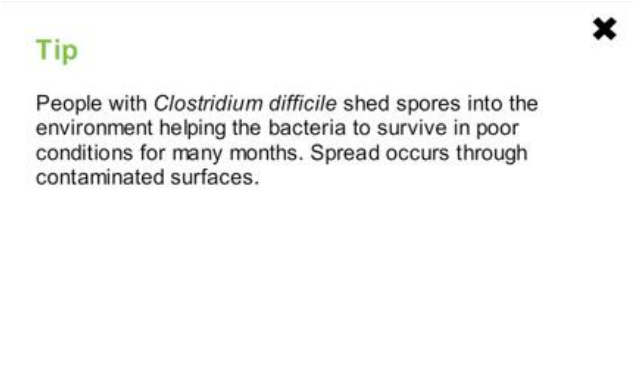
Some antibiotics can upset the balance of bacteria in the gut causing *Clostridium difficile* infection. It is possible that by restricting or reviewing William's antibiotics that infection could have been prevented.

Select **NEXT** to continue.

‹ PREV NEXT ›

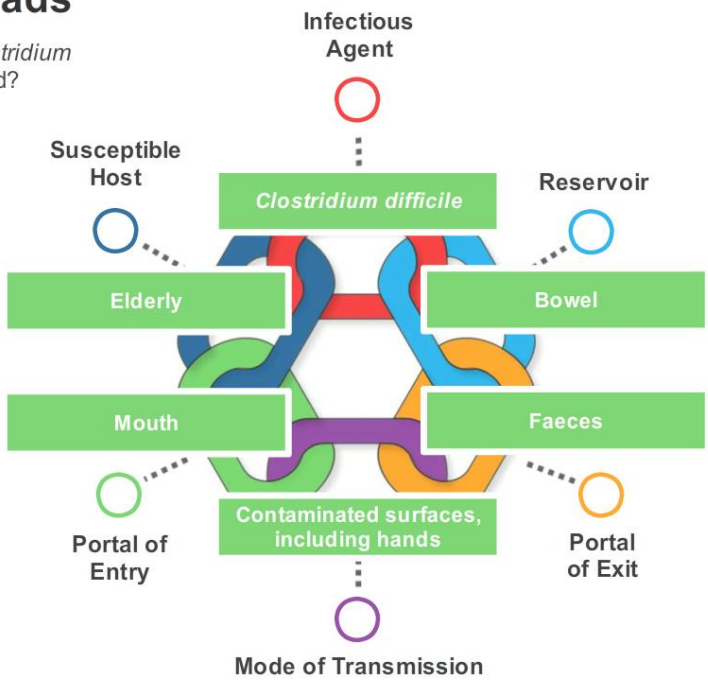


Please fill in the boxes with the correct items and then check the answer and the feedback on the following page.



How *Clostridium difficile* spreads

Now that William is in the hospital, he could spread *Clostridium difficile* to other people. How do you think it could spread?



Correct

That's correct.

People with *Clostridium difficile* shed spores into the environment through faeces, and the bacteria can survive in poor conditions for many months. Spread occurs through contaminated surfaces, including through the unwashed hands of staff and others.

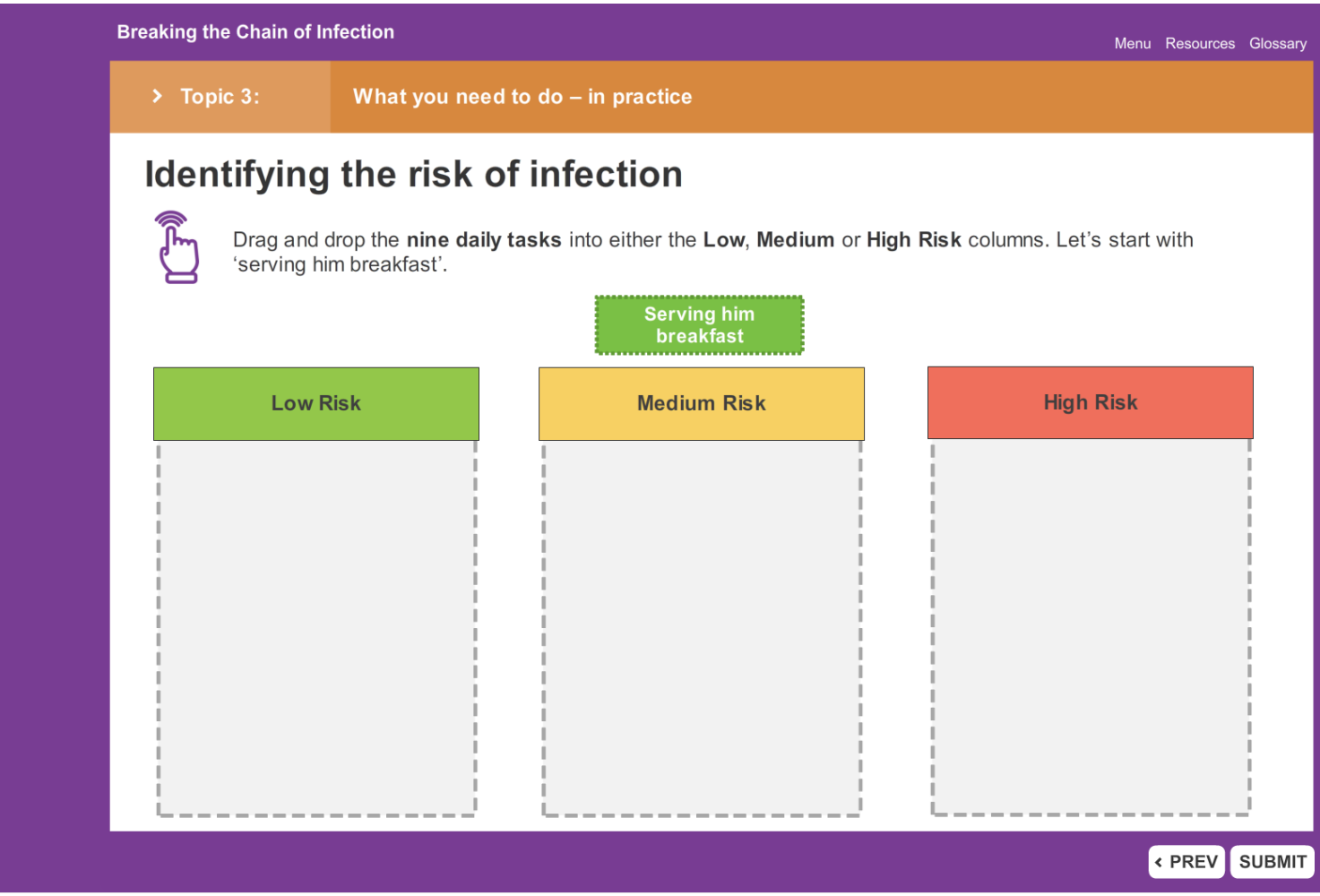
People touch these contaminated surfaces and may not wash their hands before eating food. They then ingest the spores and can develop an infection if they are a Susceptible Host (such as the elderly).

Continue ›

Identifying the risk of infection

Marie the Nurse and other care staff focus on breaking the **Mode of Transmission** link to prevent the spread of infection to others.

They look at the risks surrounding William for spreading the infection to others, including the daily tasks that they carry out with William, and decide whether they are low, medium or high risks.



Please fill in the boxes with the correct items and then check the answer and the feedback on the following page.

Taking his observations	Serving him breakfast	Shaving him
Taking him for an X-Ray	Disposing of used sharps	Cleaning up faecal soiling from the toilet seat
Taking him to the shower on a shared shower chair	Taking him for a walk	Changing his bed linen

Identifying the risk of infection

Drag and drop the **nine daily tasks** into either the **Low**, **Medium** or **High Risk** columns. Let's start with 'serving him breakfast'.

Low Risk	Medium Risk	High Risk
Serving him breakfast	Changing his bed linen	Cleaning up faecal soiling from the toilet seat
Shaving him	Taking his observations	Taking him for an X-Ray
Disposing of used sharps		Taking him to the shower on a shared shower chair
		Taking him for a walk

Correct

That's correct. You selected the following answers:

Low Risk	Medium Risk	High Risk
Serving him breakfast	Taking his observations	Taking him to the shower on a shared shower chair
Disposing of used sharps	Changing his bed linen	Taking him for an X-Ray
Shaving him		Taking him for a walk
		Cleaning up faecal soiling from the toilet seat

These do not involve touching the contaminated environment.

Bed linen will be heavily contaminated with spores but will not easily spread if managed carefully. Taking observations will require direct contact with William and equipment.

Taking William out into the wider environment increases the risk of spores being shed into the environment and onto others. Sitting on shared equipment, which may become soiled, may pass the infection onto others if not cleaned between use.

Continue

Please fill in the boxes with the correct items and then check the answer and the feedback on the following page.

Using a designated toilet

Using a bedpan

Using a commode

Minimising the risk of infection

Marie the Nurse and other care staff need to consider the different ways that they can break the **Mode of Transmission** link for each of the daily tasks. Consider for instance, taking William to the toilet. Decide which method is a low, medium or high risk of spreading infection.

Drag and drop the **three methods** into either the **Low**, **Medium** or **High Risk** column. Let's start with 'using a designated toilet'.

Low Risk	Medium Risk	High Risk
Using a designated toilet	Using a bedpan	Using a commode

Correct

That's correct. You selected the following answers:

Low Risk	Medium Risk	High Risk
Using a designated toilet	Using a bedpan	Using a commode

A designated toilet is not used by others. There is also hand washing facilities for William to wash his hands.

A bedpan has a disposable shell in the base, but there is a risk of the base becoming visibly soiled with faeces. There may not be hand washing facilities nearby.

A commode may be shared with others – there is a wider risk for contamination to occur. William will need to use the arm rests for when he cleans himself (which may not get washed). There may not be hand washing facilities nearby.

Continue >

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

Breaking the Chain of Infection

Which of the SICPs should Marie the Nurse and other care staff use to control and prevent the spread of *Clostridium difficile* infection at the **Mode of Transmission** link?

Select **five options** that apply and select **SUBMIT**.

- [x] Safe management of care equipment
- [ ] Respiratory and cough hygiene
- [ ] Safe disposal of waste (Including sharps)
- [x] Hand hygiene (staff and patient)
- [x] Safe management of the care environment
- [x] Personal Protective Equipment (PPE)
- [x] Patient placement/Assessment for infection risk (isolation)

‹ PREV SUBMIT

Correct

That's correct.

Marie the Nurse, and other care staff, could apply **all five** of these SICPs to control and prevent the spread of *Clostridium difficile* infection at the **Mode of Transmission** link. They do not need to focus on only one SICP.

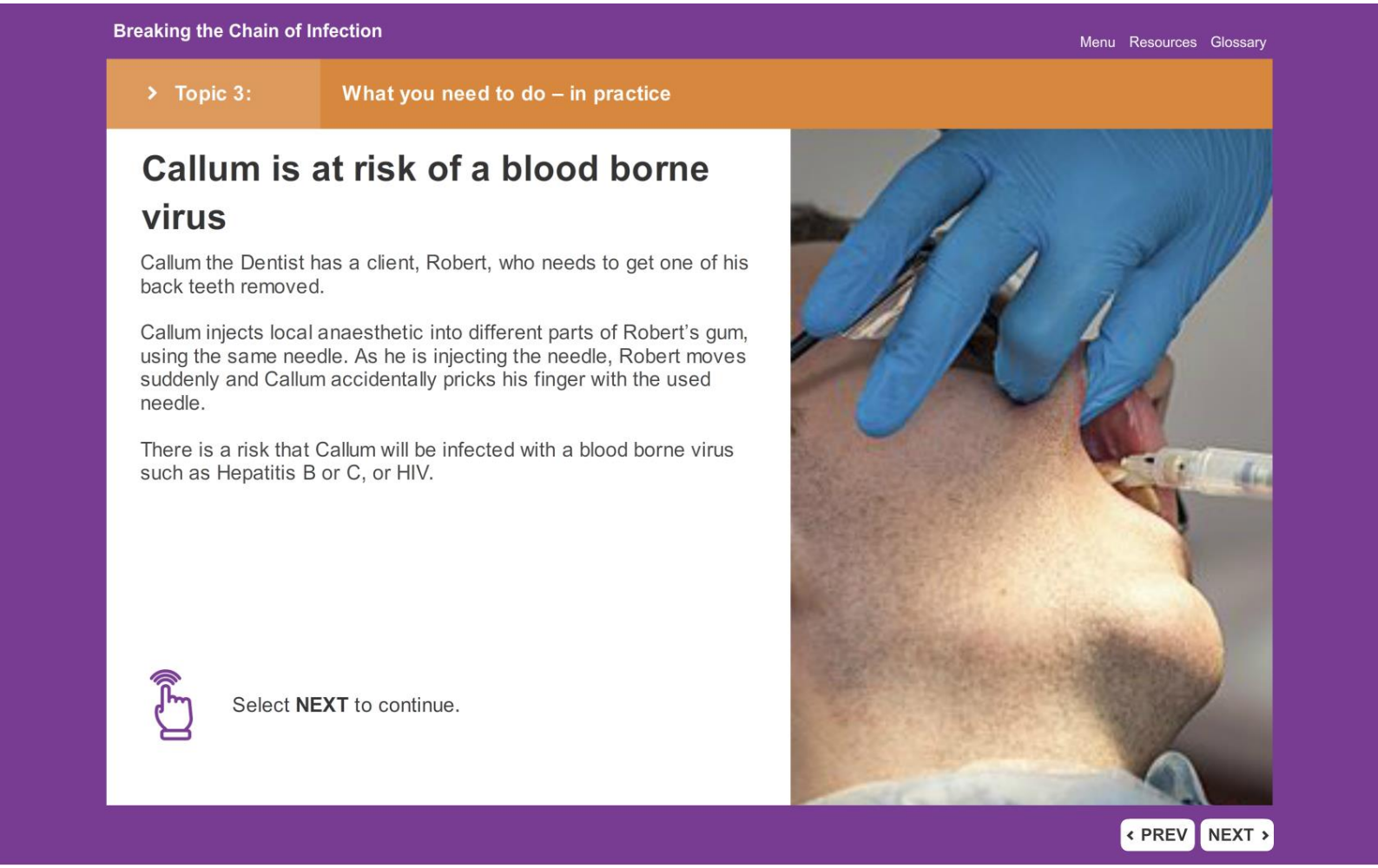
To learn more about preventing the spread of *Clostridium difficile*, download Preventing CDI Cross-Transmission in Healthcare settings.

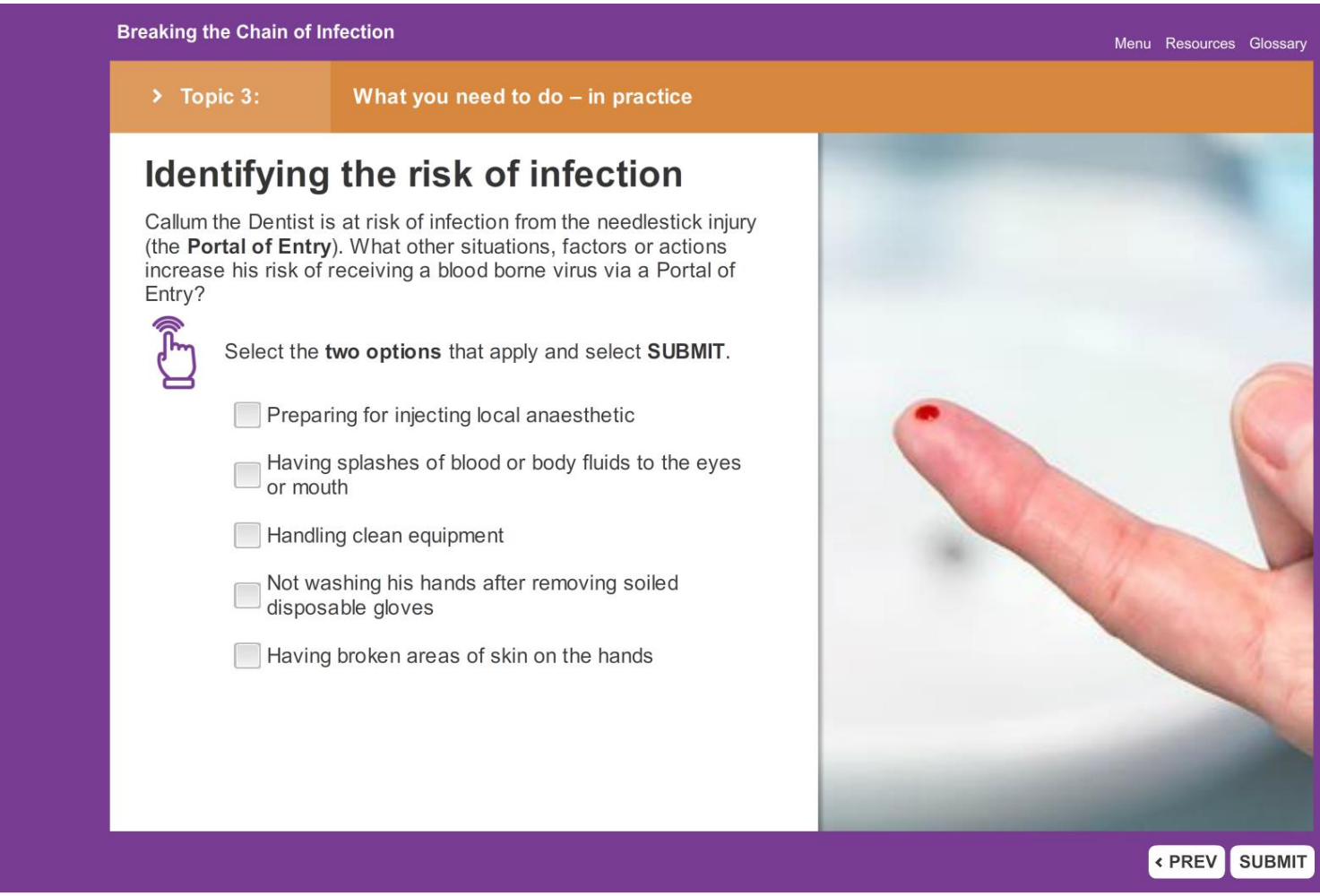
Continue ›

SUBMIT

Preventing CDI Cross-Transmission in Healthcare settings link:

http://www.documents.hps.scot.nhs.uk/hai/infection-control/evidence-for-care-bundles/cause-effect/ce-cdi-2015-05.pdf





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

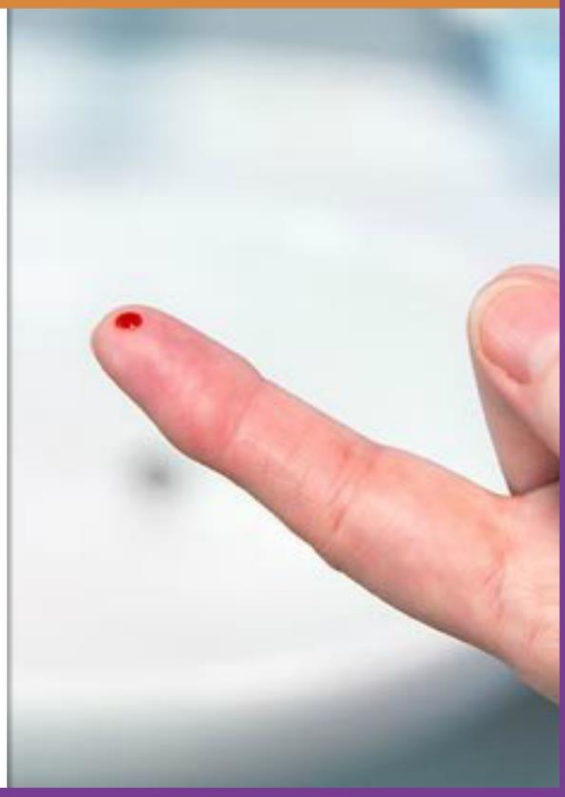
> Topic 3: What you need to do – in practice

Identifying the risk of infection

Callum the Dentist is at risk of infection from the needlestick injury (the **Portal of Entry**). What other situations, factors or actions increase his risk of receiving a blood borne virus via a Portal of Entry?

Select the **two options** that apply and select **SUBMIT**.

- [ ] Preparing for injecting local anaesthetic
- [x] Having splashes of blood or body fluids to the eyes or mouth
- [ ] Handling clean equipment
- [ ] Not washing his hands after removing soiled disposable gloves
- [x] Having broken areas of skin on the hands



‹ PREV SUBMIT

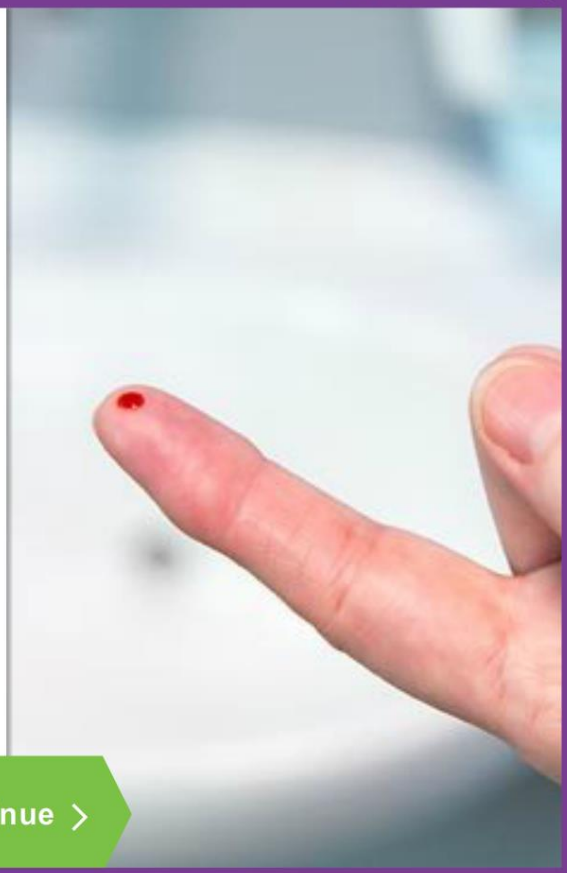
Breaking the Chain of Infection

Menu Resources Glossary

Correct

That's correct.

Blood borne viruses can enter the body through broken areas of skin and through the eyes and mouth.



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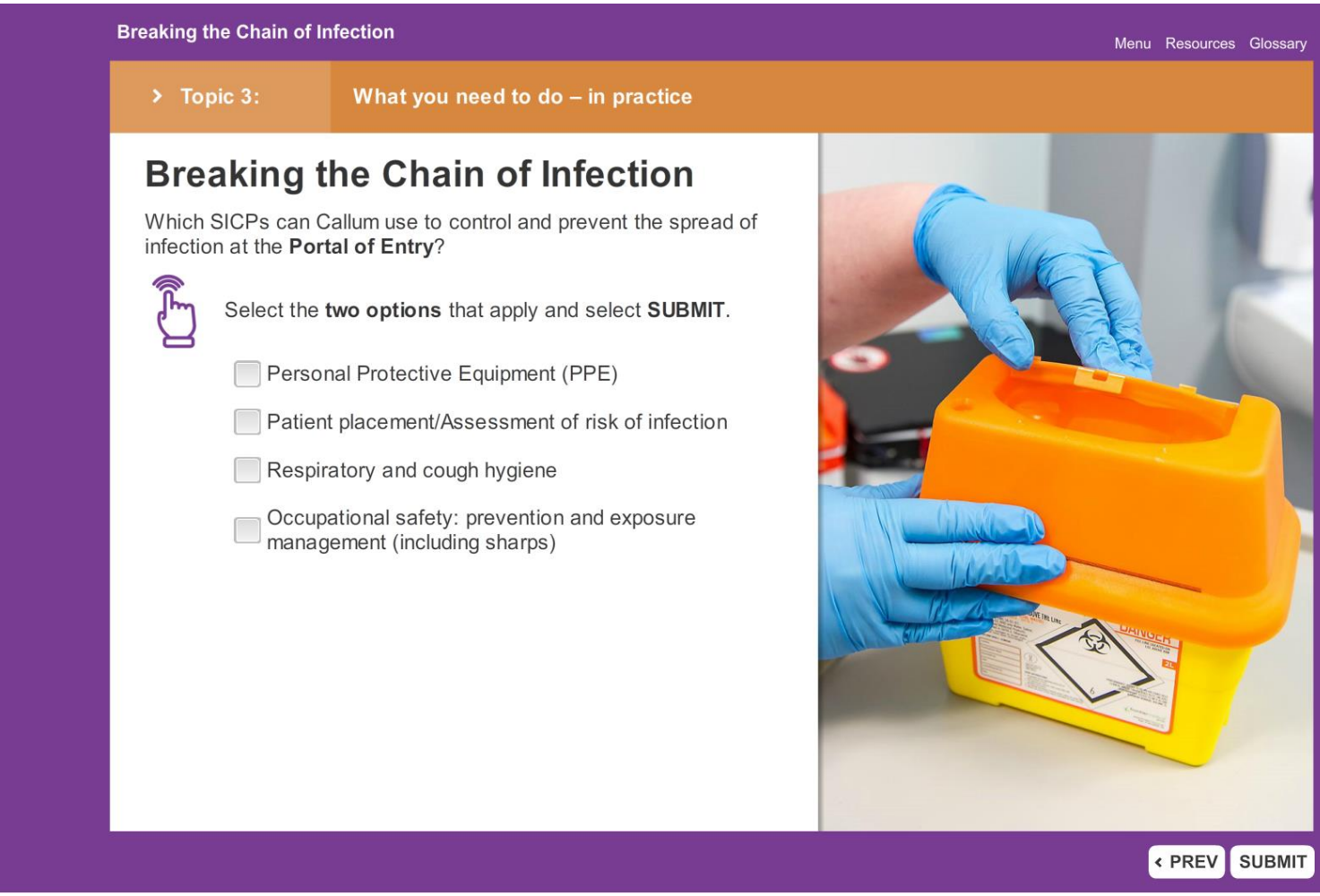


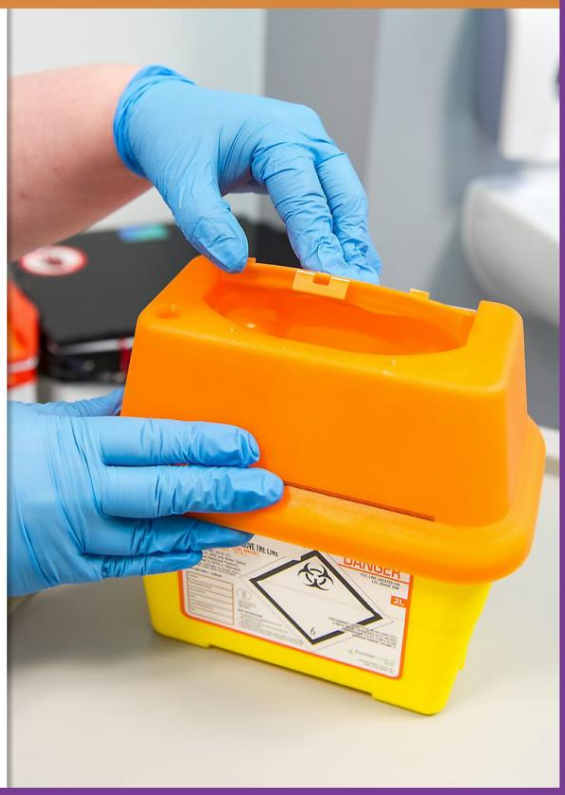
Please try to answer the question above and then check the answer and the feedback on the following page.

Breaking the Chain of Infection

Which SICPs can Callum use to control and prevent the spread of infection at the **Portal of Entry**?

Select the **two options** that apply and select **SUBMIT**.

- [x] Personal Protective Equipment (PPE)
- [ ] Patient placement/Assessment of risk of infection
- [ ] Respiratory and cough hygiene
- [x] Occupational safety: prevention and exposure management (including sharps)



Correct

That's correct.

The correct PPE will protect Callum from splashes to the eyes and mouth, and cover any broken areas of skin.

Disposable gloves can still be pierced by sharp objects, including teeth. Rapid first aid treatment is essential to stop blood borne viruses gaining entry into the body.

Continue ›

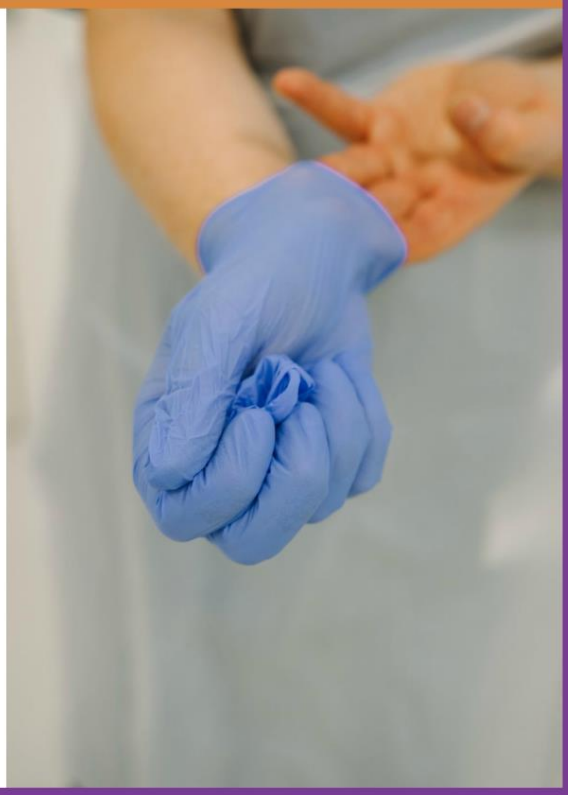
Notes for Topic 3: What you need to do – in practice

Summary

Now that you have completed this module, you will be able to use the model of the Chain of Infection in practice to stop the spread of infection. Here are the key points of this module:

- by breaking just one link in the Chain of Infection you can prevent an infection occurring
- assessment of infection is an ongoing process that changes as circumstances change
- protect Susceptible Hosts as they might not be able to fight off infection
- apply SICPs at all times, in all settings, with everyone to prevent infections in your workplace.

Next, let us look at what you can practically do to get started.



‹ PREV NEXT ›

Breaking the Chain of Infection

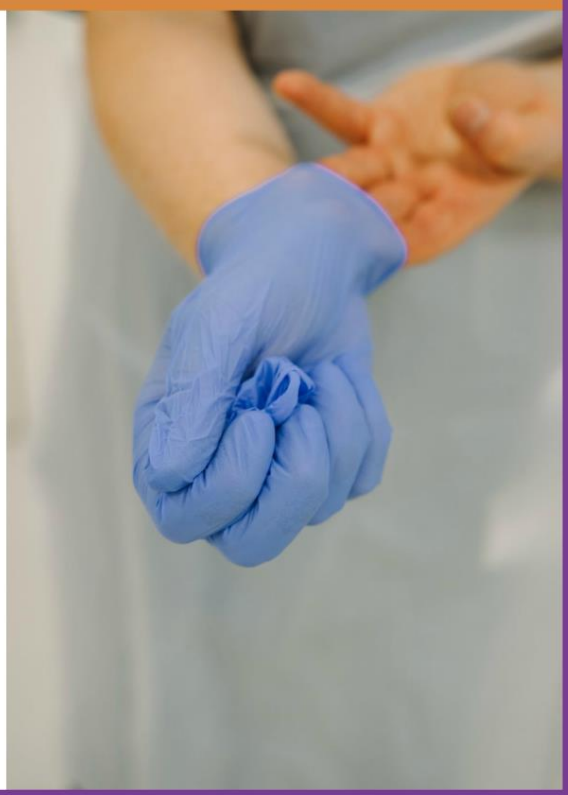
Menu Resources Glossary

› Topic 3: What you need to do – in practice

Next steps

Here are some examples of what you could do to get started:

1. identify infection risks in your work environment and in the people you care for
2. look at how you could improve infection risk assessments in your role
3. avoid inserting tubing, such as urinary catheters and ‘drips’, unless necessary and remove as soon as possible
4. take appropriate actions to break a link in the Chain of Infection to protect those in your care
5. be a role model for applying SICPs in your workplace.



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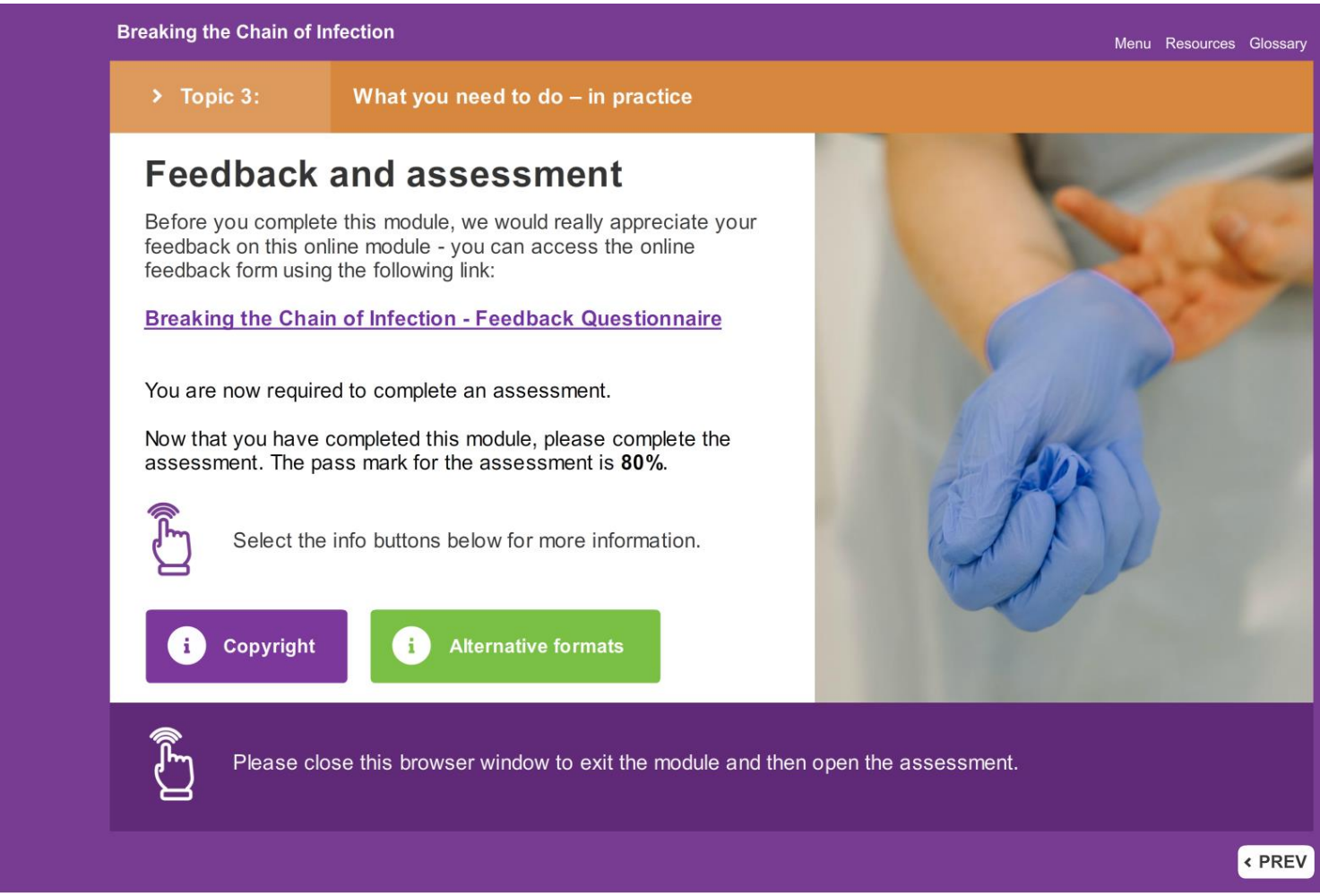
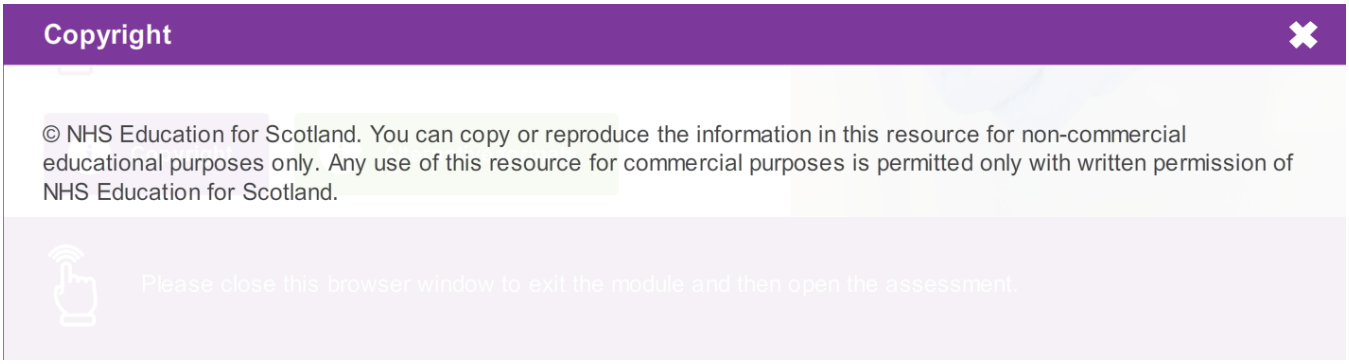
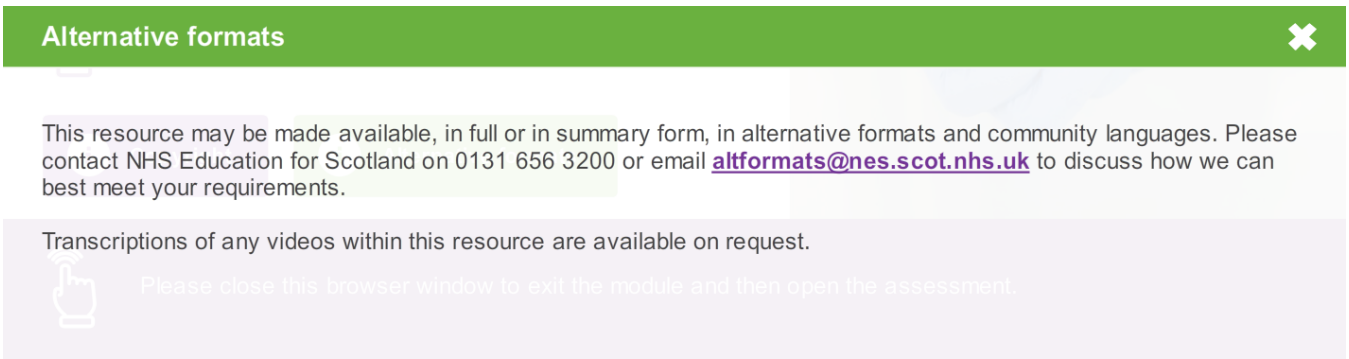


Feedback questionnaire link:

https://response.questback.com/nhseducationforscotland/sipcep02chainofinfection/





Printable learning resource – Completion Record

Learning outcomes:

- explain how micro-organisms spread using the Chain of Infection model
- recognise risk factors for infections
- identify actions to break the Chain of Infection.

Anticipated learning time: 30 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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