# DeGesh School of Entrepreneurship

## Infection Prevention and Control (Level 2)

### Short Professional Course Handbook

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| **Course title** | **Infection Prevention and Control (Level 2)** |
| **Course type** | Short professional course / CPD awareness training |
| **Delivery mode** | Online, classroom or blended delivery, subject to centre arrangements |
| **Indicative duration** | 5-7 guided learning hours, adjustable to learner and organisational need |
| **Target learners** | Adults, employees, community volunteers, education, hospitality, business, childcare, cleaning, health and social care support roles and learners preparing for workplace practice |
| **Assessment** | Short knowledge check, scenario-based questions, learner reflection, tutor-led discussion and practical hygiene awareness activities |
| **Certification** | Certificate of completion or attendance, subject to DeGesh School requirements |

**Important scope statement**

This handbook supports Level 2 awareness learning only. It does not replace emergency medical care, clinical infection-prevention competence assessment, employer-specific IPC policy, Care Quality Commission requirements, NHS mandatory training, COSHH/waste-management training, or specialist outbreak management advice. Learners working in healthcare, social care, childcare, food handling or cleaning roles must always follow current organisational policy and local risk assessments.

# Course Introduction

The Infection Prevention and Control (Level 2) course at DeGesh School of Entrepreneurship Ltd is a short professional course designed to help learners understand how infections spread and how safe everyday practice can reduce risk in workplaces, learning environments, healthcare, social care, childcare, hospitality and community settings. It builds on the practical, awareness-level approach used in the DeGesh Basic Life Support (Theory) handbook, using simple language, workplace examples, learner reflection and scenario-based assessment to support safe decision-making.

At Level 2, learners are expected to move beyond general hygiene messages and understand the reasons behind infection-prevention actions, including hand hygiene, personal protective equipment, respiratory hygiene, environmental cleaning, decontamination, waste segregation, safe linen handling, personal health responsibilities and the chain of infection. Current NHS England guidance describes standard infection control precautions as basic measures used consistently to reduce transmission from recognised and unrecognised sources of infection (NHS England, 2025b).

The course is suitable for learners in health and social care support roles, education, childcare, hospitality, business, cleaning, voluntary settings and workplaces where infection prevention and public safety are important. It is not a clinical qualification, but it provides underpinning knowledge that supports safer practice and prepares learners to follow employer-specific procedures confidently.

# Learning Outcomes

- Understand the meaning, importance and scope of infection prevention and control at Level 2.
- Explain what healthcare-associated infections are and identify common examples including MRSA, C. difficile, norovirus and COVID-19.
- Describe how infections spread through people, hands, surfaces, equipment, body fluids, respiratory droplets, waste and linen.
- Explain the chain of infection and identify practical ways to break each link.
- Recognise different types of infection, including bacterial, viral, fungal, local, systemic, colonisation and opportunistic infection.
- Explain how standard infection control precautions reduce the risk of transmission in care and workplace settings.
- Demonstrate awareness of effective hand hygiene, including when to wash hands and when alcohol hand rub is not enough.
- Understand how to select, use, remove and dispose of personal protective equipment safely according to task and risk.
- Describe the levels of decontamination and when cleaning, disinfection or sterilisation may be needed.
- Identify different categories of waste and the importance of using the correct bins according to local policy.
- Explain safe handling of linen, including contaminated or infected linen.
- Understand personal health responsibilities including reporting illness, covering wounds, vaccination awareness and reporting exposure incidents.
- Apply infection-prevention knowledge to practical case scenarios in education, childcare, hospitality, cleaning, health and social care environments.
- Reflect on personal responsibilities and identify next steps for safer practice in the learner's own setting.

# Contents

# Chapter 1: Healthcare-Associated Infections (HCAIs)

Chapter aim: to help learners understand what HCAIs are, why they matter and why prevention is a shared responsibility.

NHS England explains that HCAIs can develop as a direct result of healthcare interventions or from contact with a healthcare setting, and that MRSA and Clostridioides difficile are well-known examples (NHS England, 2026a).

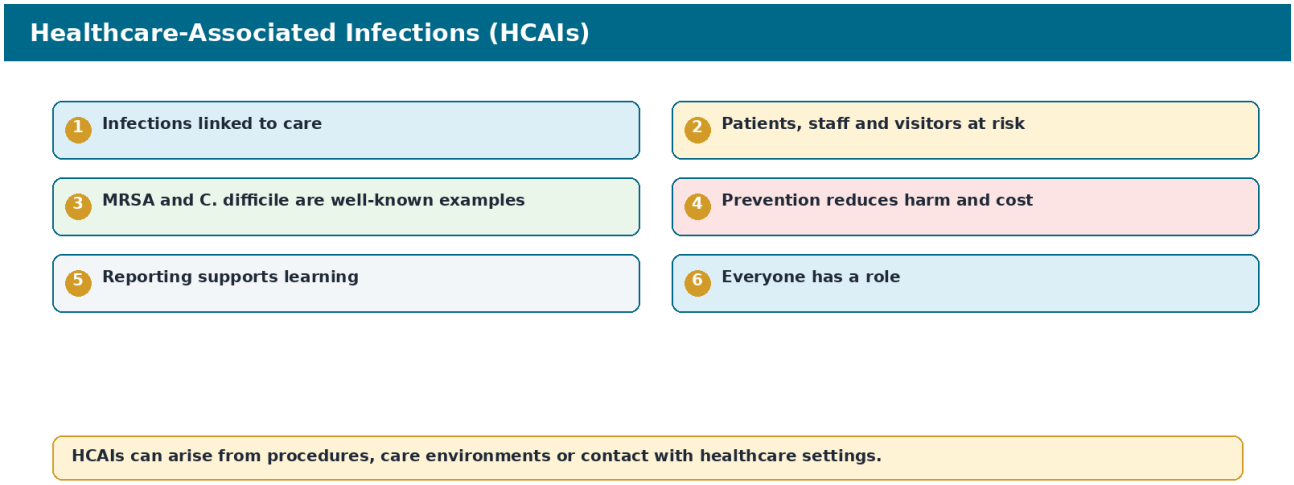


*Figure 1.1: HCAIs affect patients, staff, visitors and organisations.*

## Key learning points

- HCAIs are infections associated with healthcare or care contact, not only hospital wards.
- They may involve bacteria, viruses, fungi or other microorganisms.
- People at higher risk include those with wounds, invasive devices, weakened immunity, older age or recent antibiotics.
- Prevention relies on consistent routine practice, not only action during outbreaks.
- All staff and learners have a role in noticing risks and reporting concerns.

## What HCAIs mean

A healthcare-associated infection is an infection that develops in connection with healthcare or care activities. It may appear during a hospital stay, after a procedure, during residential care, or following contact with contaminated equipment, surfaces, hands, linen or wounds. The infection may not be visible immediately, so prevention must be routine.

## Why HCAIs matter

HCAIs can increase pain, recovery time, hospital admission, antibiotic use, absence from work and risk of severe illness. They can also affect staff confidence, family trust and organisational reputation. For Level 2 learners, the key message is that small actions, repeated consistently, protect people who may be vulnerable.

## Examples in practice

A resident develops diarrhoea after antibiotics and needs assessment for C. difficile. A surgical wound becomes red, painful and leaking fluid. A visitor with vomiting attends a care home and later several residents become unwell. Each example shows how risk recognition and early reporting support safer care.

## Actions to avoid

- Do not assume infection risk is low because someone looks well.
- Do not ignore hand hygiene after brief contact or after touching shared equipment.
- Do not discuss a person's infection status with people who do not need to know.
- Do not wait for an outbreak before following routine precautions.

### Worked example for learners

A learner working in a training centre notices that several learners are using the same keyboard after coughing into their hands. The learner reports the concern, cleans the shared equipment according to local procedure, encourages hand hygiene and reminds learners about cough etiquette. This simple response reduces cross-contamination risk.

## Learner reflection / knowledge check

1. What does HCAI stand for?
2. Why are vulnerable people at greater infection risk?
3. Name three actions that can reduce HCAI risk.

# Chapter 2: What causes Healthcare Associated Infections?

Chapter aim: to explain the common causes and contributing factors that allow infections to spread in care and workplace settings.

NHS England guidance identifies potential infection sources as blood, body fluids, secretions, excretions, non-intact skin, mucous membranes and contaminated equipment or items in the care environment (NHS England, 2025b).

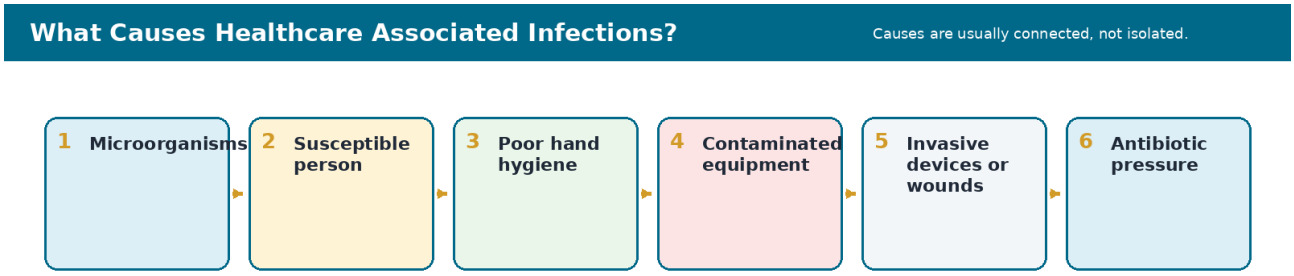


*Figure 2.1: HCAIs are caused by connected risk factors.*

## Key learning points

- Microorganisms need a route to spread and a person who can be affected.
- Poor hand hygiene is one of the most common preventable causes of spread.
- Contaminated equipment and high-touch surfaces can carry microorganisms.
- Invasive devices, wounds and broken skin create entry points.
- Antibiotic use can change normal bacteria and increase risk of some infections such as C. difficile.

## Microorganisms and reservoirs

Bacteria, viruses and fungi may live on skin, in the gut, in respiratory secretions, in wounds, on equipment or in the wider environment. A reservoir is any place where microorganisms can survive and potentially multiply.

## Care activities that increase risk

Changing dressings, assisting with toileting, handling linen, cleaning body-fluid spillages, preparing food, supporting personal care or using shared equipment can all increase transmission risk if precautions are not followed.

## Human factors

Time pressure, lack of supplies, poor communication, unclear responsibility, not knowing where PPE is stored or assuming a task is "quick" can all lead to missed infection-control steps. Level 2 learners should notice these barriers and escalate them.

## Actions to avoid

- Do not use the same gloves for multiple tasks or people.
- Do not place clean items on contaminated surfaces.
- Do not use shared equipment without cleaning it as required.
- Do not assume antibiotics prevent all infections; inappropriate antibiotic use can increase some risks.

### Worked example for learners

A support worker helps one person with personal care and then prepares a drink for another person without cleaning hands. This can transfer microorganisms from body fluids or contaminated surfaces to food or drink. The safer action is to remove gloves if used, dispose of them correctly, clean hands and then start the clean task.

## Learner reflection / knowledge check

1. Name two sources of microorganisms in care settings.
2. How can equipment contribute to HCAIs?
3. Why can moving from a “dirty” task to a “clean” task be risky?

# Chapter 3: How to Reduce the Risk of Spreading Infection

Chapter aim: to introduce standard infection control precautions and practical actions that reduce transmission risk.

The NHS England National Infection Prevention and Control Manual lists ten elements of standard infection control precautions, including hand hygiene, respiratory hygiene, PPE, safe environment, equipment, linen, blood and body fluid management, waste and occupational safety (NHS England, 2025b).

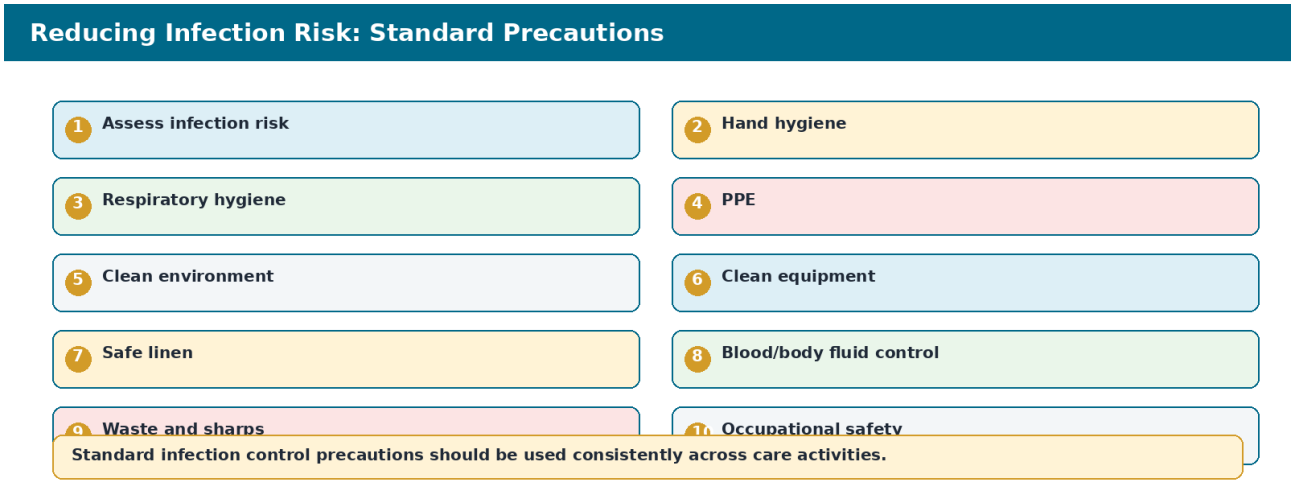


*Figure 3.1: Ten standard precautions that reduce infection risk.*

## Key learning points

- Use standard precautions for every person, every time, based on risk.
- Clean hands at the right moments and after removing PPE.
- Respiratory hygiene reduces spread from coughs and sneezes.
- PPE must match the task and exposure risk.
- Cleaning, decontamination, waste and linen procedures prevent environmental spread.

## Standard precautions in simple language

Standard infection control precautions are everyday actions used to reduce infection risk even when no infection is known. They are based on the idea that blood, body fluids, broken skin, mucous membranes, equipment and care environments may carry microorganisms.

## Risk assessment before the task

Before any task, ask: What contact will I have? Could there be blood or body fluids? Is the person coughing, vomiting or having diarrhoea? Is equipment clean? What PPE is needed? What waste or linen will be produced? This short thinking process prevents unsafe shortcuts.

## Escalation

Learners should report missing PPE, unavailable soap, overflowing waste, broken cleaning equipment, suspected outbreaks, exposure incidents, sharps injuries and any infection-control concern that they cannot correct safely.

## Actions to avoid

- Do not rely on PPE alone while ignoring hand hygiene or cleaning.
- Do not save time by skipping risk assessment.
- Do not reuse disposable PPE.
- Do not continue a task if safe equipment or supplies are unavailable; escalate the problem.

### Worked example for learners

A learner is asked to help clean a room after a person has vomited. They do not start immediately. They check local procedure, put on gloves and apron, use the correct cleaning materials, dispose of waste safely, clean hands after PPE removal and report the incident. This is a standard precautions approach.

## Learner reflection / knowledge check

1. What are standard infection control precautions?
2. Why is risk assessment needed before a task?
3. What should you report if infection-control supplies are missing?

# Chapter 4: Your Responsibilities for your Personal Health

Chapter aim: to help learners understand how their own health, behaviour and reporting responsibilities affect infection prevention.

Public health guidance advises people with symptoms of respiratory infection who have a high temperature or feel unwell to try to stay at home and avoid contact with others until well enough to resume normal activities (UKHSA, 2026a).

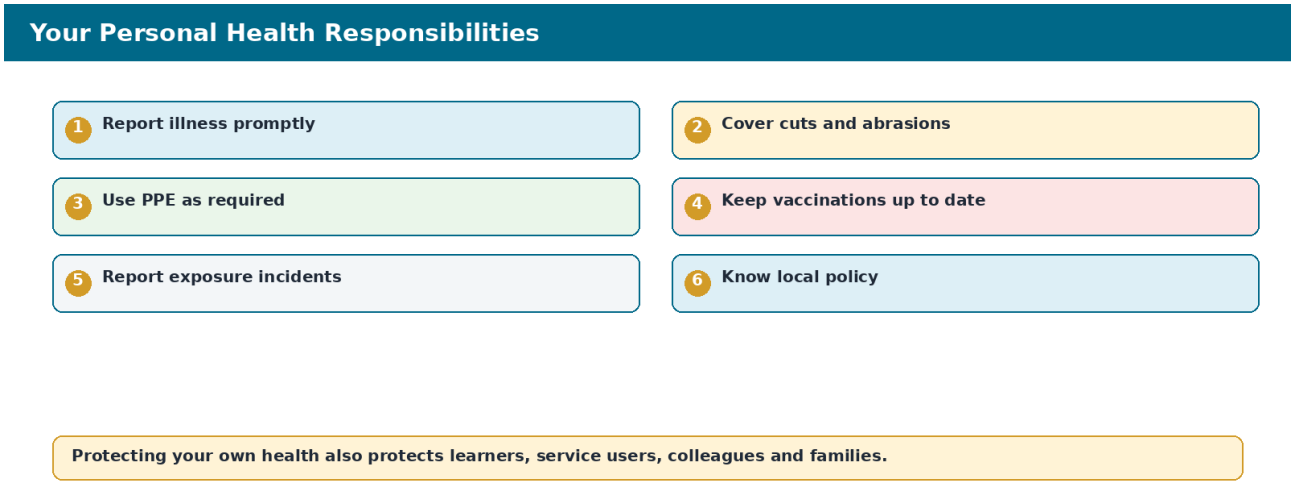


*Figure 4.1: Personal health responsibilities protect everyone.*

## Key learning points

- Report symptoms that may place others at risk, such as vomiting, diarrhoea, fever or respiratory illness.
- Cover cuts and abrasions with waterproof dressings.
- Follow immunisation and occupational health advice relevant to your role.
- Report sharps injuries, splashes, bites or exposure to blood/body fluids immediately.
- Do not work beyond your role, training or policy.

## Fitness for work

Personal responsibility means knowing when you may be a risk to others. Vomiting, diarrhoea, fever, unexplained rash, infected wounds or respiratory symptoms may require reporting to a manager or tutor and following exclusion or return-to-work advice.

## Skin, wounds and personal hygiene

Broken skin can be a route for microorganisms to enter or leave the body. Cover cuts with waterproof dressings, maintain personal hygiene, keep nails short where required by policy and avoid wearing jewellery or items that interfere with hand hygiene in care roles.

## Exposure incidents

If blood or body fluid splashes into eyes, mouth, broken skin or a sharps injury occurs, immediate first aid and reporting are required. Delayed reporting can affect risk assessment and access to post-exposure advice.

## Actions to avoid

- Do not attend high-risk settings while symptomatic without telling the appropriate person.
- Do not hide a needlestick or exposure incident because you feel embarrassed.
- Do not cover a wound with a loose or dirty dressing.
- Do not ignore occupational health advice or vaccination requirements relevant to your role.

### Worked example for learners

A learner develops diarrhoea before a shift in a care setting. Instead of attending and hoping it settles, they inform the manager, follow local sickness and return-to-work policy, and avoid preparing food or supporting personal care until safe. This protects vulnerable people from avoidable risk.

## Learner reflection / knowledge check

1. Which symptoms should be reported before attending a care setting?
2. Why should cuts be covered?
3. What should you do after a sharps injury or body-fluid splash?

# Chapter 5: Different Types of Infection

Chapter aim: to help learners recognise different types of infection and the difference between colonisation and infection.

The NHS describes MRSA as bacteria that may live harmlessly on the skin but can cause serious infection if it gets inside the body, illustrating the difference between carriage and infection (NHS, 2026a).

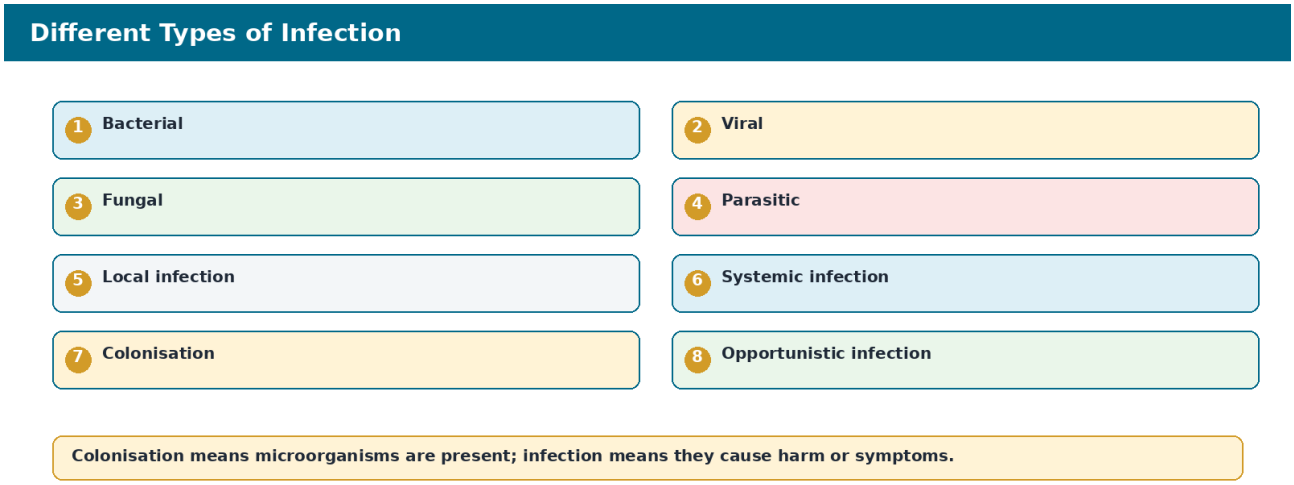


*Figure 5.1: Infection types and important distinctions.*

## Key learning points

- Bacterial infections may need antibiotics, but antibiotic choice should be clinical.
- Viral infections do not respond to antibiotics and often require supportive care and prevention.
- Fungal infections may affect skin, nails or vulnerable people.
- Colonisation means microorganisms are present without causing symptoms.
- Systemic infection affects the whole body and may become serious quickly.

## Bacterial, viral, fungal and parasitic infections

Bacteria can cause wound infections, urinary infections or pneumonia. Viruses can cause COVID-19, influenza or norovirus. Fungi can cause skin infections or opportunistic infections in immunocompromised people. Parasites are less common in UK everyday care settings but remain important in some contexts.

## Local and systemic infection

A local infection affects one area, such as a red wound or infected skin. A systemic infection affects the whole body and may cause fever, confusion, fast breathing, low blood pressure or severe weakness. Suspected sepsis is a medical emergency.

## Colonisation vs infection

A person can carry microorganisms without symptoms. For example, MRSA may be present on skin or in the nose without illness. Infection occurs when microorganisms invade tissue or trigger symptoms. IPC precautions matter in both situations because colonised people may still spread microorganisms.

## Actions to avoid

- Do not tell people they need antibiotics; clinical staff decide treatment.
- Do not assume no symptoms means no infection risk.
- Do not ignore signs of severe illness such as confusion, breathing difficulty or collapse.
- Do not use the same response for every infection; follow pathogen-specific and local guidance.

### Worked example for learners

A learner reads that a patient is “MRSA positive” but has no wound symptoms. They understand this may be colonisation, not active infection. They still follow hand hygiene, PPE and cleaning policy because the organism can spread by touch.

## Learner reflection / knowledge check

1. What is the difference between colonisation and infection?
2. Why do antibiotics not treat viral infections?
3. Give one example of a local infection and one systemic warning sign.

# Chapter 6: The Chain of Infection

Chapter aim: to explain the six links in the chain of infection and show how everyday precautions break transmission.

UKHSA guidance for children and young people's settings states that infection prevention and control measures aim to interrupt the chain of transmission (UKHSA, 2025a).

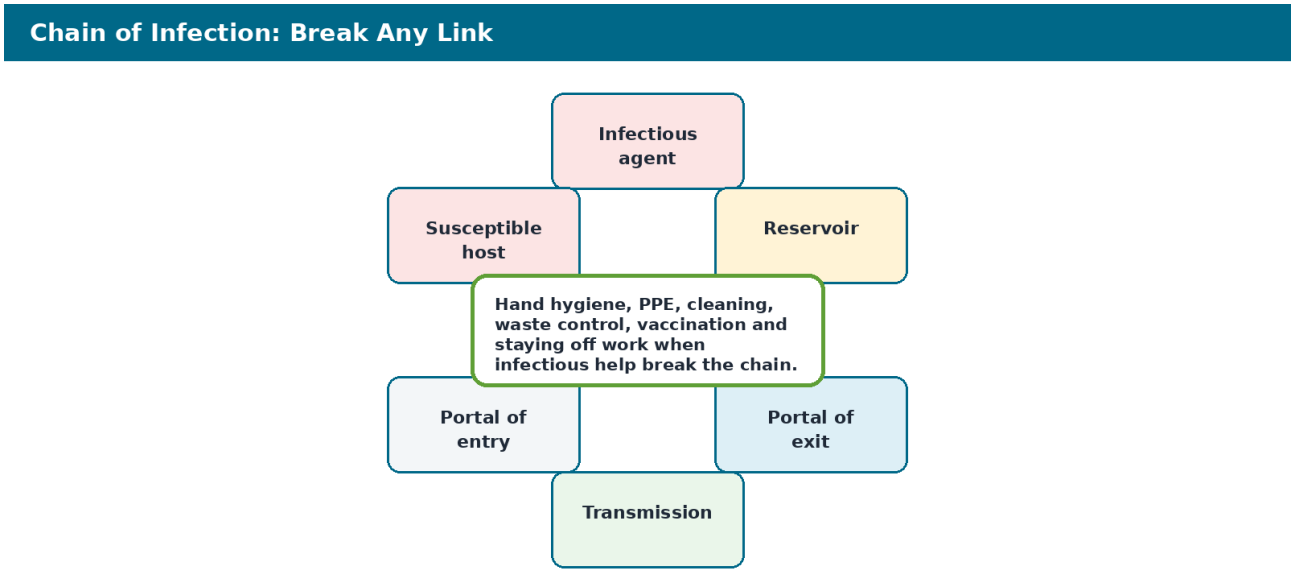


*Figure 6.1: Breaking any link can reduce transmission.*

## Key learning points

- The chain includes infectious agent, reservoir, portal of exit, transmission, portal of entry and susceptible host.
- Breaking one link can reduce or stop spread.
- Hand hygiene interrupts transmission.
- PPE protects portals of entry and reduces contamination.
- Vaccination and good health reduce susceptibility where applicable.

## Six links explained

The infectious agent is the microorganism. The reservoir is where it lives. The portal of exit is how it leaves the reservoir, such as coughing, diarrhoea or blood. The mode of transmission is how it moves, such as hands, droplets or equipment. The portal of entry is how it enters another person, such as mouth, nose, eyes, broken skin or devices. The susceptible host is a person who can become infected.

## Breaking the chain in practice

Hand washing after toileting breaks faecal-oral transmission. Wearing gloves and apron for body-fluid tasks reduces contamination. Cleaning high-touch surfaces reduces environmental reservoirs. Vaccination reduces susceptibility and severe illness for some infections. Staying home when infectious removes a source from the setting.

## Using the chain in scenarios

When analysing a scenario, learners should ask: What is the likely source? How could it leave? How could it reach someone else? What action breaks the link now? This makes IPC practical rather than abstract.

## Actions to avoid

- Do not focus only on the microorganism and forget environment or host factors.
- Do not assume one action is enough for every scenario.
- Do not ignore indirect transmission through shared surfaces or equipment.
- Do not forget that vulnerable people may become infected more easily.

### Worked example for learners

A norovirus outbreak occurs after a person vomits in a communal area. The chain includes virus in vomit, contaminated surfaces, hands touching surfaces, and another person touching their mouth. Breaking the chain requires isolation/exclusion according to policy, PPE, cleaning/disinfection, waste disposal and hand washing with soap and water.

## Learner reflection / knowledge check

1. Name the six links in the chain of infection.
2. Which link does hand hygiene mainly interrupt?
3. How can vaccination affect the chain?

# Chapter 7: MRSA

Chapter aim: to introduce MRSA, how it spreads and how standard precautions reduce the risk of transmission.

The NHS explains that MRSA is a type of bacteria that usually lives harmlessly on the skin but can cause serious infection if it gets inside the body; it mainly spreads through touch or contaminated items (NHS, 2026a).

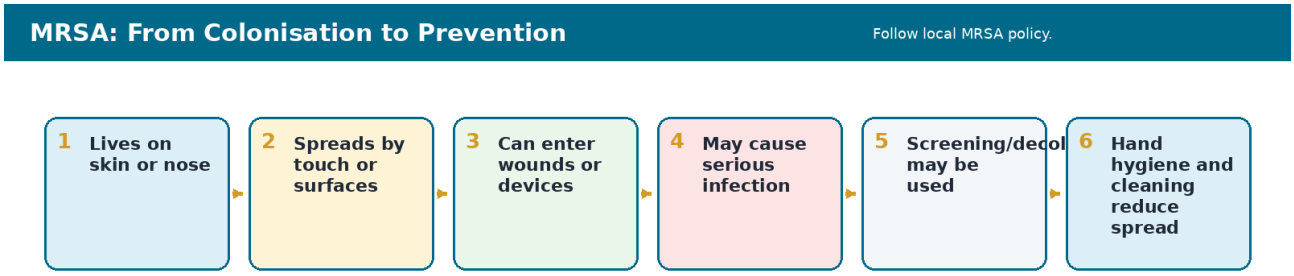


*Figure 7.1: MRSA prevention focuses on hands, wounds, cleaning and local policy.*

## Key learning points

- MRSA stands for meticillin-resistant Staphylococcus aureus.
- It may be present on skin or in the nose without symptoms.
- It can cause serious infection if it enters wounds, blood, lungs or devices.
- Spread commonly occurs through hands, direct contact and contaminated surfaces.
- Prevention includes hand hygiene, wound care, cleaning, PPE where required and local screening/decolonisation policy.

## Colonisation and infection

A person may carry MRSA without illness. This is colonisation. Infection occurs when MRSA enters the body and causes symptoms such as painful swollen skin, pus, warmth, fever or serious illness. Learners should not diagnose; they should report signs and follow policy.

## How MRSA spreads

MRSA mainly spreads by touch, including hands, shared equipment, dressings, bed rails, door handles or personal items. Any task involving wounds, invasive devices or skin contact requires careful hand hygiene and appropriate PPE.

## Preventing MRSA transmission

Follow hand hygiene, PPE, cleaning and equipment decontamination procedures. Keep wounds covered where possible. Do not share personal items such as towels. In clinical settings, screening and decolonisation may be used under healthcare direction.

## Actions to avoid

- Do not label or stigmatise people with MRSA.
- Do not skip hand hygiene because gloves were worn.
- Do not share equipment between people without cleaning according to policy.
- Do not attempt MRSA treatment or decolonisation unless directed by healthcare staff.

### Worked example for learners

A learner supports a person known to be colonised with MRSA. They follow standard precautions, use PPE for personal care according to risk, clean shared equipment after use and maintain dignity. They do not treat the person as dangerous; they treat the task as requiring safe practice.

## Learner reflection / knowledge check

1. What does MRSA stand for?

2. How can MRSA spread?

3. What is one difference between colonisation and infection?

# Chapter 8: Clostridium Difficile

Chapter aim: to explain the infection risk linked to Clostridioides difficile, diarrhoea, antibiotics and environmental spores.

The NHS explains that C. difficile can occur when antibiotics disturb the balance of bacteria in the bowel, and that it can spread easily when bacteria from faeces get onto objects and surfaces (NHS, 2025a).

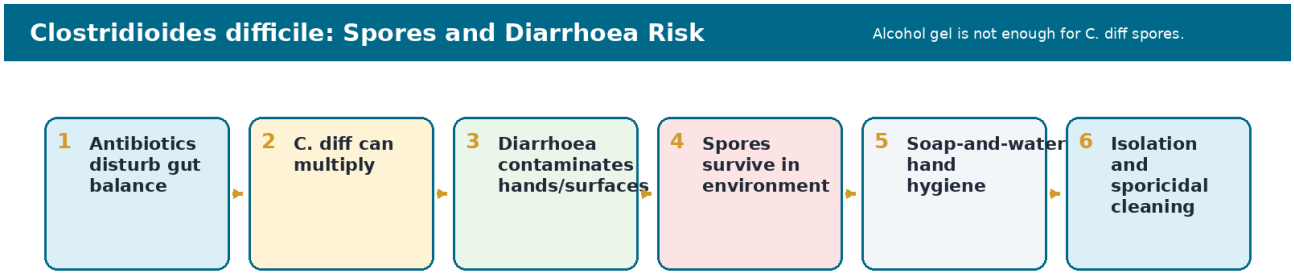


*Figure 8.1: C. difficile requires soap-and-water hand hygiene and environmental control.*

## Key learning points

- C. difficile is associated with diarrhoea and can be serious, especially in vulnerable people.
- Recent antibiotic use, older age, hospital/care home stay and weakened immunity increase risk.
- Spores can survive in the environment and spread through faecal contamination.
- Soap and water are important because alcohol hand sanitiser does not kill or remove C. difficile effectively.
- Isolation, cleaning and reporting must follow local policy.

## Why antibiotics matter

Antibiotics can disrupt normal gut bacteria. This may allow C. difficile to multiply and produce toxins that cause diarrhoea and inflammation. Learners should understand the risk but not advise stopping prescribed medication; clinical staff make treatment decisions.

## Spore survival

C. difficile forms spores that can survive on surfaces. This makes environmental cleaning, correct disinfectant use and hand washing with soap and water especially important. Alcohol hand rub alone is not sufficient for C. difficile risk.

## What to report

Report new or unexplained diarrhoea, especially after antibiotics or in a care setting. Follow local procedures for isolation, specimen collection, enhanced cleaning, PPE, waste and linen.

## Actions to avoid

- Do not rely on alcohol hand gel alone after contact with C. difficile risk.
- Do not share toilets, commodes or equipment without cleaning according to policy.
- Do not advise anti-diarrhoeal medicines; seek clinical advice.
- Do not ignore diarrhoea in a care setting.

### Worked example for learners

A care worker notices a resident has repeated loose stools after a course of antibiotics. They report promptly, use gloves and apron for personal care, wash hands with soap and water, ensure the commode is cleaned according to policy and follow isolation instructions from senior staff.

## Learner reflection / knowledge check

1. Why can antibiotics increase C. difficile risk?
2. Why is soap-and-water hand hygiene important?
3. What should be reported in a care setting?

# Chapter 9: Norovirus

Chapter aim: to help learners recognise norovirus risk and apply simple actions to reduce rapid spread.

The NHS states that norovirus spreads very easily through faeces and can be caught through close contact, contaminated surfaces or food handled by someone with norovirus (NHS, 2026b).

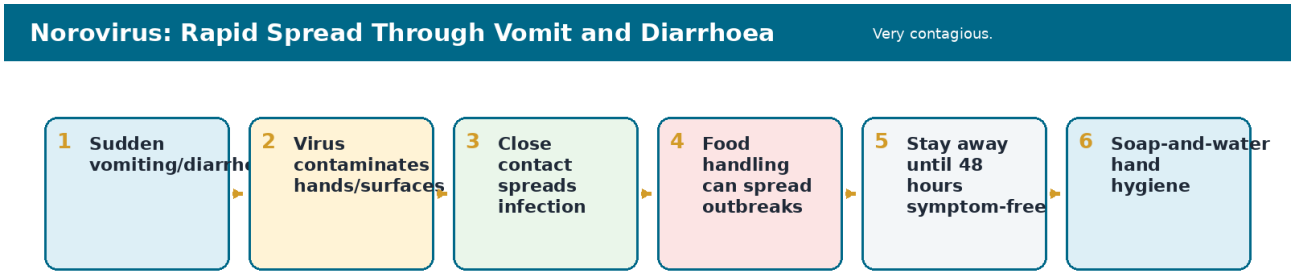


*Figure 9.1: Norovirus spreads quickly and requires rapid control actions.*

## Key learning points

- Norovirus commonly causes sudden vomiting and diarrhoea.
- It spreads through close contact, contaminated surfaces and contaminated food or water.
- Alcohol hand gel does not kill norovirus reliably; wash hands with soap and water.
- People should not attend work, school or nursery until they have been free from sickness or diarrhoea for 2 days, following guidance.
- Cleaning, laundry control and avoiding visits to vulnerable settings are important.

## Recognising norovirus

Norovirus may cause sudden nausea, vomiting, diarrhoea, stomach cramps, headache, fever or aching. It spreads easily in schools, nurseries, care homes, cruise ships, hospitals and shared living environments because only a small amount of virus can infect others.

## Preventing spread

Hand washing with soap and water, cleaning toilets and high-touch surfaces, washing contaminated clothing and bedding separately at high temperature, avoiding food preparation while ill and staying away from high-risk settings are key actions.

## Why 48 hours matters

A person may still spread norovirus after symptoms stop. NHS guidance advises not going to work, school or nursery until there has been no sickness or diarrhoea for two days. Organisations may have specific outbreak policies.

## Actions to avoid

- Do not use alcohol gel as the only hand hygiene method for norovirus.
- Do not attend work or learning settings while vomiting or having diarrhoea.
- Do not handle food for others while symptomatic.
- Do not shake contaminated linen or clothing.

### Worked example for learners

A learner in a hospitality setting vomits overnight and feels better in the morning. They still inform the manager and do not attend food-handling duties until the appropriate symptom-free period has passed. This protects customers and colleagues from a possible outbreak.

## Learner reflection / knowledge check

1. What are common norovirus symptoms?

2. Why is soap and water preferred?

3. How long should someone stay away from work or school after symptoms stop?

# Chapter 10: COVID-19 (SARS-COV2)

Chapter aim: to support learners to understand COVID-19 transmission and practical control measures in workplace and care settings.

NHS guidance states that COVID-19 spreads easily through close contact when people breathe, speak, cough or sneeze and release droplets containing the virus; it can also spread through contaminated surfaces (NHS, 2026c).

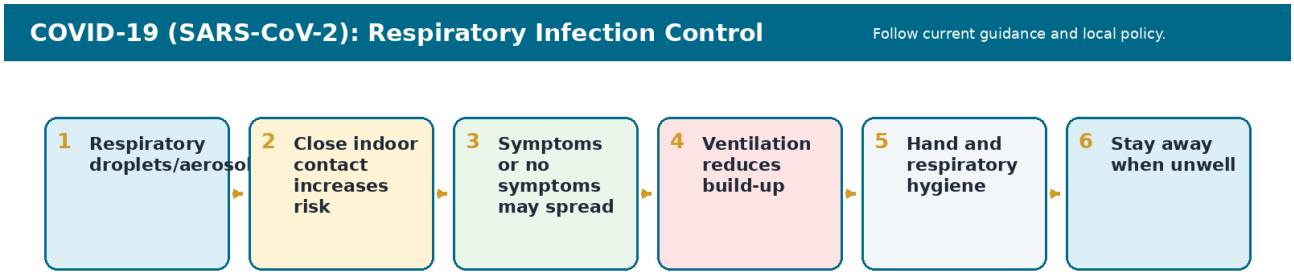


*Figure 10.1: COVID-19 risk reduction combines respiratory hygiene, ventilation, cleaning and staying away when unwell.*

## Key learning points

- COVID-19 is caused by the SARS-CoV-2 virus.
- People can catch or spread COVID-19 even without symptoms, after vaccination or after previous infection.
- Indoor, crowded and poorly ventilated spaces increase risk.
- Hand hygiene, respiratory hygiene, surface cleaning, ventilation and staying away when unwell reduce spread.
- Healthcare and care settings must follow local IPC guidance and risk assessment.

## Transmission

COVID-19 spreads mainly through respiratory particles released when infected people breathe, speak, cough or sneeze. Close contact, crowded indoor spaces and poor ventilation increase risk. Touching contaminated surfaces and then the eyes, nose or mouth can also contribute.

## Symptoms and staying away

Symptoms may include cough, high temperature, loss or change of taste/smell, shortness of breath, tiredness, muscle aches, sore throat, runny nose, headache, diarrhoea or feeling sick. Public guidance advises people who feel unwell with respiratory symptoms and high temperature or who are not well enough for normal activities to stay at home where possible.

## Workplace controls

Controls include encouraging hand hygiene, cleaning frequently touched surfaces, improving ventilation, risk-based face coverings, protecting vulnerable people, following isolation or sickness policies and reporting outbreaks or clusters according to local procedures.

## Actions to avoid

- Do not attend high-risk settings while unwell without reporting symptoms.
- Do not assume vaccination means a person cannot catch or spread infection.
- Do not ignore ventilation in indoor spaces.
- Do not use COVID-19 rules from previous years without checking current guidance and local policy.

### Worked example for learners

A learner in a care setting develops a cough, fever and tiredness. They inform the supervisor before attending work, follow sickness and testing advice where applicable, and avoid close contact with vulnerable service users. This is safer than “pushing through” a shift.

## Learner reflection / knowledge check

1. What causes COVID-19?

2. Why can indoor crowded spaces increase risk?

3. Name three actions that reduce the spread of COVID-19.

# Chapter 11: COVID-19 Mutations and Vaccinations

Chapter aim: to explain why COVID-19 variants occur and how vaccination contributes to protection.

UKHSA vaccination information for spring 2026 states that COVID-19 is more serious in older people and people with certain underlying conditions, and that eligible groups are offered a spring dose to top up protection (UKHSA, 2026b).

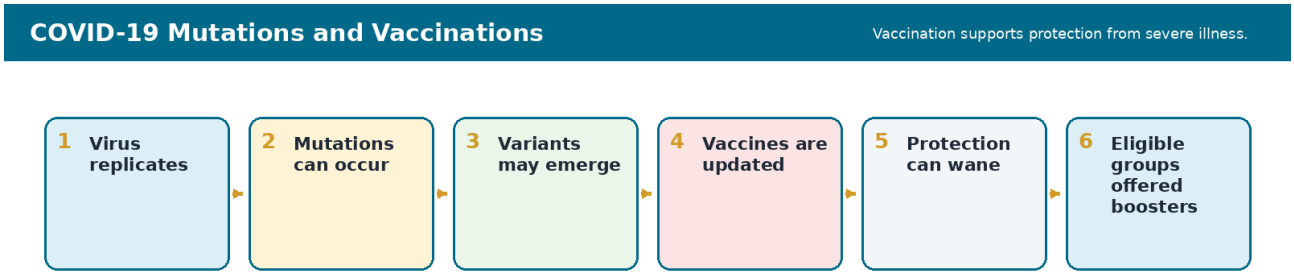


*Figure 11.1: Mutations can create variants; vaccination supports protection.*

## Key learning points

- Viruses can mutate when they replicate.
- Some mutations may give rise to variants with changed transmission or immune escape characteristics.
- Vaccines may be updated to match more recent variants.
- Protection can reduce over time, which is why booster programmes may be offered to eligible groups.
- Vaccination reduces risk of severe illness but does not replace IPC precautions.

## What mutations mean

A mutation is a change in the genetic material of a virus. Most mutations have little effect, but some may help a virus spread, avoid some immune protection or become more noticeable in surveillance. This is why public health agencies monitor variants.

## Vaccination in practice

Vaccines train the immune system to recognise the virus and reduce the risk of severe illness. Updated vaccines may target more recent variants. Eligibility changes over time, so learners should check current NHS/UKHSA advice rather than relying on old information.

## Why precautions still matter

Vaccinated people can still catch or spread COVID-19. Therefore, hand hygiene, respiratory etiquette, ventilation, staying away when unwell and protecting vulnerable people remain important in workplaces and care settings.

## Actions to avoid

- Do not assume a “new variant” means panic; follow official public health guidance.
- Do not claim vaccination gives complete protection against infection.
- Do not give vaccination advice outside your role; signpost to NHS or occupational health advice.
- Do not ignore IPC precautions after vaccination.

### Worked example for learners

A learner hears that updated COVID-19 vaccines are being offered to specific eligible groups. They understand that eligibility is based on current public health advice and that vaccination adds protection, but workplace precautions such as ventilation, cleaning and staying away when ill remain important.

## Learner reflection / knowledge check

1. What is a viral mutation?
2. Why might booster doses be offered to some people?
3. Why are IPC precautions still needed after vaccination?

# Chapter 12: Hand Washing

Chapter aim: to help learners understand when and how hand hygiene should be performed and why it is central to infection prevention.

NHS England states that hand hygiene is considered one of the most important ways to reduce transmission of infectious agents that cause HCAIs (NHS England, 2025b).

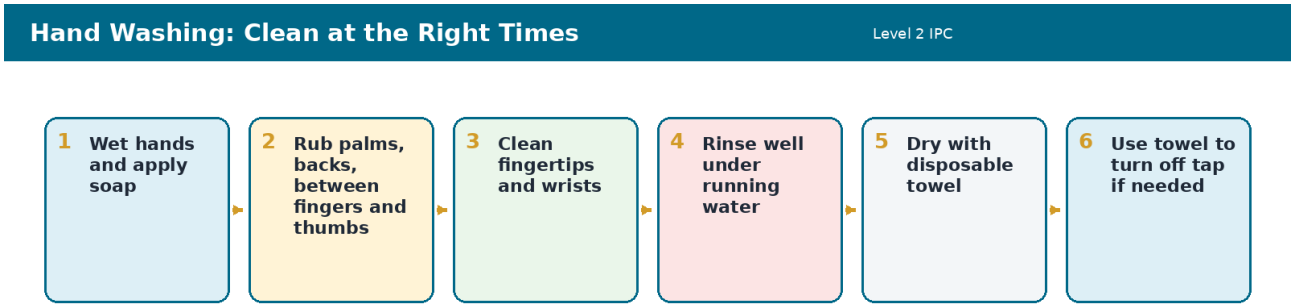


*Figure 12.1: Hand washing should be thorough and timed to the task.*

## Key learning points

- Wash hands before clean tasks and after dirty or body-fluid tasks.
- Use soap and water when hands are visibly dirty or after diarrhoea/vomiting risk.
- Alcohol hand rub can be used when hands are not visibly dirty, but it is not effective for some organisms such as norovirus and C. difficile.
- Dry hands thoroughly because wet hands transfer microorganisms more easily.
- Hand hygiene is required after removing gloves.

## When to clean hands

Clean hands before eating or preparing food, before touching wounds or clean equipment, after using the toilet, after coughing or sneezing, after handling waste or linen, after removing gloves, after contact with body fluids and after touching shared equipment or high-touch surfaces.

## Technique

Effective hand washing includes wetting hands, applying soap, rubbing palms, backs of hands, between fingers, thumbs, fingertips and wrists, rinsing well and drying with a disposable towel where available. Learners should follow local posters and training.

## Common barriers

Barriers include rushing, skin irritation, missing soap, poor access to sinks, jewellery, long nails or assuming gloves replace hand hygiene. These barriers should be addressed through reporting, planning and safe habits.

## Actions to avoid

- Do not use alcohol gel when hands are visibly dirty or after known diarrhoea/vomiting risk unless local policy specifically allows as an interim step before washing.
- Do not wear gloves instead of cleaning hands.
- Do not touch your phone, face or personal items with contaminated gloves.
- Do not ignore skin damage; report occupational skin problems early.

### Worked example for learners

A learner removes gloves after cleaning a body-fluid spill. They dispose of the gloves correctly and wash hands with soap and water. They do not use the same gloves to touch a door handle, phone or computer keyboard.

## Learner reflection / knowledge check

1. Name four moments when hand hygiene is needed.
2. Why should hands be dried properly?
3. When is soap and water better than alcohol hand rub?

# Chapter 13: Personal Protective Equipment

Chapter aim: to explain the purpose, selection, safe use and limitations of PPE.

NHS England includes personal protective equipment as one of the ten standard infection control precautions and states that PPE use should be determined by assessment of task and exposure risk (NHS England, 2025b).

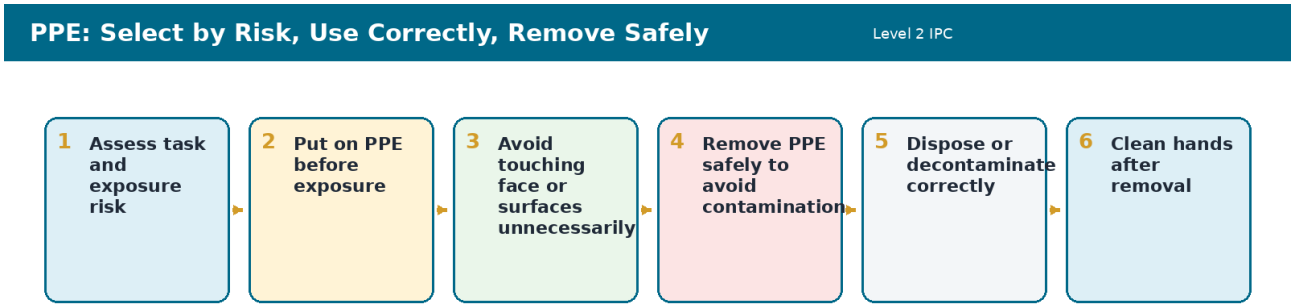


*Figure 13.1: PPE protects only when selected, used and removed correctly.*

## Key learning points

- PPE is selected according to the task and expected exposure.
- Gloves protect hands but do not replace hand hygiene.
- Aprons or gowns protect clothing and skin from contamination.
- Masks or respirators and eye protection may be needed for respiratory or splash risk according to policy.
- PPE must be removed safely to avoid contaminating skin, clothing or the environment.

## Types of PPE

Common PPE includes gloves, disposable aprons, gowns, fluid-resistant surgical masks, respirators, eye protection and face shields. Which items are needed depends on the task, setting, person's infection risk and local policy.

## Donning and doffing

Donning means putting PPE on before exposure. Doffing means removing PPE safely after the task. The highest risk of self-contamination often occurs during removal. Learners should follow local posters and training sequences.

## Limitations of PPE

PPE does not compensate for poor cleaning, poor hand hygiene or unsafe work habits. PPE can also create waste and discomfort, so it must be used appropriately, not casually or repeatedly beyond its intended use.

## Actions to avoid

- Do not wear the same gloves between different people or tasks.
- Do not wash or sanitise disposable gloves for reuse.
- Do not wear PPE in clean areas after a contaminated task.
- Do not remove masks, respirators or eye protection in a way that contaminates the face or hands.

### Worked example for learners

A learner helps clean a toilet area after diarrhoea. They put on gloves and apron before the task, avoid touching their phone, remove PPE safely, dispose of it in the correct waste stream and wash hands with soap and water afterwards.

## Learner reflection / knowledge check

1. What does PPE stand for?

2. Why are gloves not a substitute for hand hygiene?

3. What should guide PPE selection?

# Chapter 14: Levels of Decontamination

Chapter aim: to help learners distinguish cleaning, disinfection and sterilisation and choose safe actions within their role.

NHS England standard precautions include safe management of the care environment and care equipment, while the NIPCM states that precautions should be based on risk assessment and exposure to blood or body fluids (NHS England, 2025a; NHS England, 2025b).

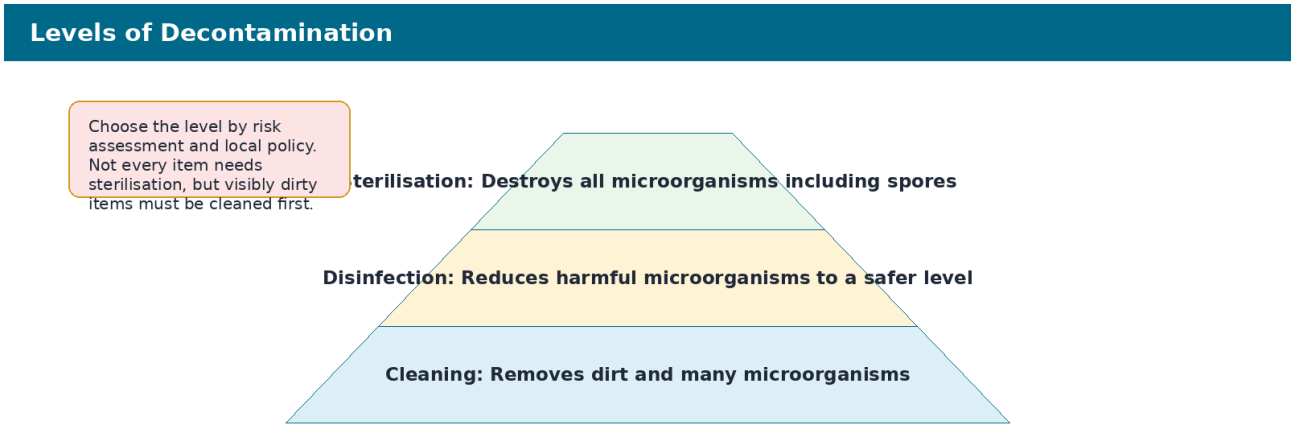


*Figure 14.1: Cleaning, disinfection and sterilisation are different levels of decontamination.*

## Key learning points

- Cleaning removes dirt, organic matter and many microorganisms.
- Disinfection reduces microorganisms to a safer level but may not remove all spores.
- Sterilisation destroys all microorganisms and is required for certain invasive equipment.
- Cleaning is usually needed before disinfection or sterilisation.
- Learners must follow manufacturer instructions and local policy.

## Cleaning

Cleaning uses water, detergent and mechanical action to remove dirt, grease, body fluids and microorganisms. It is the foundation of decontamination because disinfectants may not work properly on dirty surfaces.

## Disinfection

Disinfection uses heat or chemicals to reduce harmful microorganisms on surfaces or equipment. The correct product, concentration, contact time and safety precautions matter. Learners should not mix cleaning chemicals or improvise products.

## Sterilisation

Sterilisation is used for equipment that enters sterile body areas or breaks the skin. It is normally managed through specialist processes, not informal workplace cleaning. Level 2 learners should know the concept and escalate equipment concerns.

## Actions to avoid

- Do not disinfect visibly dirty equipment without cleaning first unless local product instructions clearly support a combined process.
- Do not mix chemicals such as bleach and other cleaners.
- Do not reuse single-use items.
- Do not guess decontamination methods for clinical equipment; check local procedure.

### Worked example for learners

After a training manikin is used, the learner checks the cleaning procedure. They wipe surfaces with the approved product and contact time, dispose of wipes correctly and clean hands. They do not use random household chemicals or put electrical equipment under water.

## Learner reflection / knowledge check

1. What is the difference between cleaning and disinfection?
2. Why is cleaning usually needed first?
3. Who should handle sterilisation processes?

# Chapter 15: Different Kinds of Waste and Which Bins to Use

Chapter aim: to introduce waste segregation and the importance of using the correct container for each waste stream.

HSE states that healthcare waste management is essential to ensure health and social care activities do not pose a risk of infection, and NHS England HTM 07-01 provides best-practice guidance for safe healthcare waste management (HSE, 2026; NHS England, 2024).

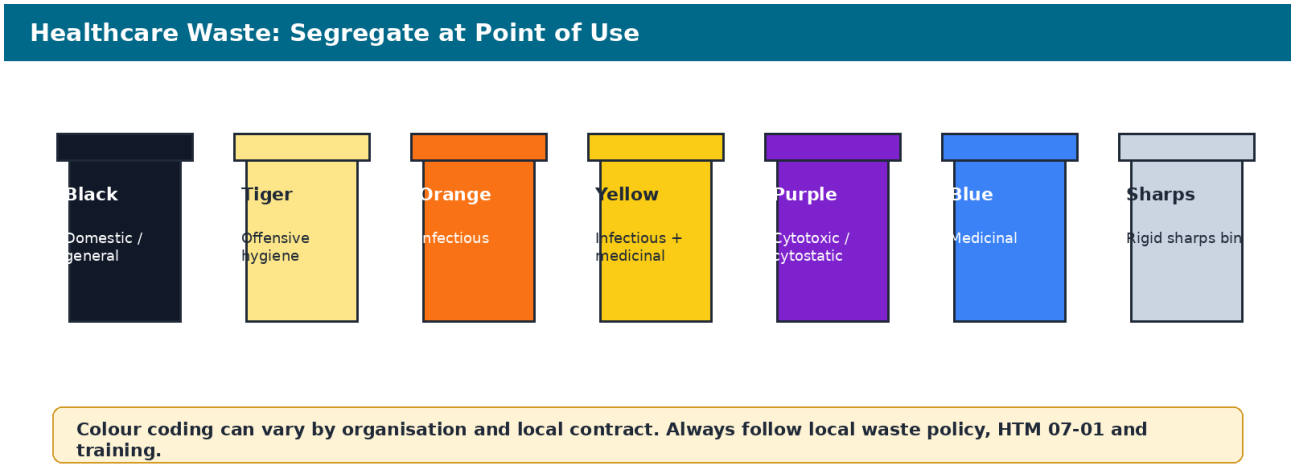


*Figure 15.1: Waste must be segregated at the point of use and according to local colour coding.*

## Key learning points

- Waste must be segregated at the point where it is produced.
- Domestic, offensive, infectious, medicinal, cytotoxic/cytostatic and sharps waste require different handling routes.
- Colour coding may vary, so local policy and labels must be followed.
- Sharps must go into approved sharps containers and never into general waste.
- Overfilled bags or bins create handling and infection risks.

## Common waste streams

General domestic waste may go into black bags. Offensive hygiene waste often uses tiger bags. Infectious waste may use orange or yellow streams depending on whether medicinal contamination is present. Cytotoxic/cytostatic waste is usually purple-coded. Medicinal waste may be blue. Sharps require rigid containers with appropriate lids and labels. Local arrangements must be checked.

## Point-of-use segregation

The person producing the waste should place it in the correct stream immediately. Moving waste around to decide later increases risk. Labels, posters and staff training help prevent errors.

## Sharps safety

Needles, lancets, scalpels and other sharps can cause injury and infection exposure. Sharps containers must be assembled correctly, not overfilled, closed when reaching the fill line and stored safely. Sharps injuries must be reported immediately.

## Actions to avoid

- Do not put sharps in domestic waste.
- Do not overfill waste bags or sharps bins.
- Do not reach into waste bags to retrieve items.
- Do not rely on memory if you are unsure; check local waste poster or ask a responsible person.

### Worked example for learners

A learner finds a used needle left on a table. They do not pick it up with bare hands or put it in a black bin. They keep others away and immediately inform the responsible trained person so it can be disposed of safely in an approved sharps container.

## Learner reflection / knowledge check

1. Why is waste segregation important?
2. What should you do if you are unsure which bin to use?
3. Why are sharps bins different from waste bags?

# Chapter 16: Safe Handling of Linen

Chapter aim: to explain how clean, used and infected linen should be handled to reduce contamination risk.

NHS England includes safe management of healthcare linen among the ten standard infection control precautions (NHS England, 2025b).

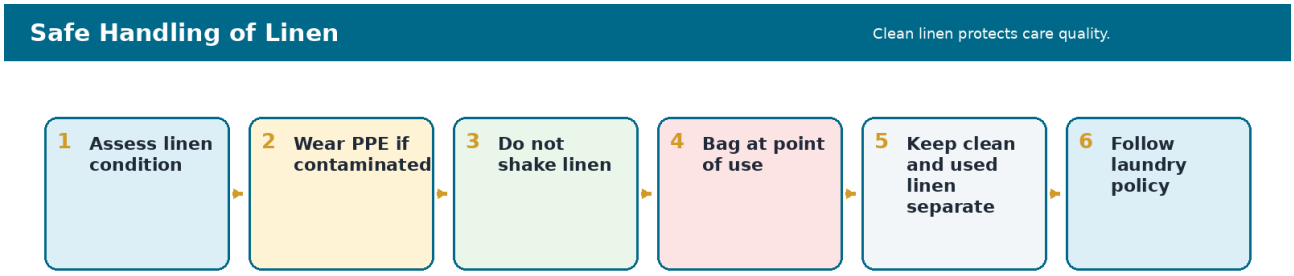


*Figure 16.1: Safe linen handling reduces spread from fabric and body fluids.*

## Key learning points

- Separate clean linen from used or contaminated linen.
- Use PPE when handling linen contaminated with blood, body fluids or infection risk.
- Do not shake linen because it can disperse microorganisms.
- Bag used linen at the point of use according to local policy.
- Wash or process linen according to laundry instructions and infection risk.

## Clean linen

Clean linen should be stored in a clean, dry area away from used linen, waste, cleaning chemicals and floor contamination. Handling clean linen with contaminated hands or gloves can make it unsafe for the next person.

## Used and contaminated linen

Used linen may contain skin scales, sweat and microorganisms. Soiled linen may contain blood, faeces, vomit or other body fluids. Infected linen may require special bags or water-soluble bags according to local laundry policy.

## Linen movement

Carry linen away from the body where possible, avoid placing it on the floor, do not shake it, and bag it promptly. After handling used or soiled linen, remove PPE safely and clean hands.

## Actions to avoid

- Do not shake used linen.
- Do not carry soiled linen against your uniform or clothing.
- Do not mix clean and used linen.
- Do not leave contaminated linen in communal areas.

### Worked example for learners

In a care home, a bed sheet is soiled with diarrhoea. The learner puts on gloves and apron, rolls the linen inward to contain contamination, avoids shaking it, places it in the correct bag at the point of use, removes PPE and washes hands.

## Learner reflection / knowledge check

1. Why should used linen not be shaken?

2. How should clean linen be stored?

3. What PPE may be needed for contaminated linen?

# Chapter 17: Summary

Chapter aim: to bring together the core learning from Infection Prevention and Control (Level 2).

The NIPCM aims to make it easy for staff to apply effective IPC precautions, reduce variation and optimise IPC practice across care settings in England (NHS England, 2025a).

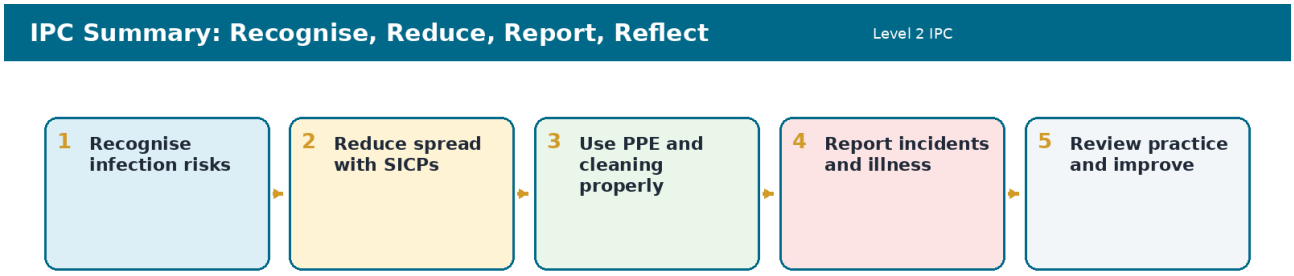


*Figure 17.1: Recognise infection risk, reduce spread, report concerns and reflect on practice.*

## Key learning points

- IPC is everyone's responsibility, not only the infection-control team's responsibility.
- Hand hygiene is one of the most important routine actions.
- The chain of infection helps learners understand how spread occurs and where to intervene.
- PPE, cleaning, waste, linen and personal health responsibilities work together.
- Reporting and reflection support safer systems and continuous improvement.

## Core IPC principles

The course can be summarised as: assess risk, clean hands, use PPE appropriately, keep environments and equipment clean, manage waste and linen safely, report illness and incidents, protect dignity and follow local policy.

## When to report immediately

Report suspected outbreaks, vomiting or diarrhoea clusters, respiratory illness clusters, body-fluid exposure, sharps injury, missing PPE, cleaning failure, overflowing waste, contaminated linen problems, broken equipment or any situation that may put people at infection risk.

## Next steps after the course

Learners should identify local IPC policies, PPE storage, hand hygiene facilities, waste posters, cleaning schedules, linen procedures, incident reporting forms and named staff who can advise on infection-control concerns.

## Actions to avoid

- Do not treat IPC as a one-off course only.
- Do not ignore local policy because general knowledge seems enough.
- Do not hide mistakes or exposure incidents.
- Do not forget to refresh knowledge when guidance changes.

### Worked example for learners

After completing the course, a learner checks their workplace: where soap and paper towels are located, how to report a body-fluid spill, which waste bins are used, who the infection-control lead is and where cleaning schedules are kept. This turns learning into safer practice.

## Learner reflection / knowledge check

1. What are the key routine IPC actions?
2. What must be reported immediately?
3. What will you check in your own workplace after this course?

# Chapter 18: A Chance to Reflect

Chapter aim: to help learners reflect on their confidence, responsibilities, limitations and next steps after completing the Infection Prevention and Control (Level 2) course.

Reflection supports safer practice because infection prevention depends on repeated everyday actions, awareness of personal limits and willingness to report concerns. Learners should use the activities below to identify what they understand, what they need to check locally and what they may need further training on.

## Reflection activity 1: Personal confidence check

| Statement | Yes | Not yet | Action I will take |
|---|---|---|---|
| I can explain what HCAIs are and why they matter. | | | |
| I can describe the chain of infection and how to break it. | | | |
| I know when to wash hands with soap and water rather than using hand gel. | | | |
| I can identify common PPE and explain when it may be required. | | | |
| I understand the difference between cleaning, disinfection and sterilisation. | | | |
| I know how to report illness, body-fluid exposure or infection-control concerns. | | | |
| I know where to find local IPC, waste and linen procedures in my setting. | | | |

## Reflection activity 2: Scenario questions

1. A learner has vomiting and diarrhoea but feels better the next morning. What should they do before attending a care or food-handling setting?

2. A staff member removes gloves after cleaning a spill and immediately touches their phone. What infection-control issue has occurred?

3. A person has suspected C. difficile. Why is soap-and-water hand hygiene important?

4. A classroom has shared keyboards and several learners are coughing. What IPC actions could reduce risk?

5. You find a waste bag or sharps bin that is overfilled. What should you do?

6. You are unsure whether linen is infected or ordinary used linen. What should you do before handling it?

## Reflection activity 3: My action plan

| | |
|---|---|
| **One thing I will check after this course** | |
| **One person or team I will ask about IPC procedures** | |
| **One practical training need I have identified** | |
| **One question I still have** | |

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