Infection.
Prevention.
Control.
You're in safe hands

NHS

Preventing Infection Workbook

Guidance for Domiciliary Care staff
2nd Edition

Name

Job Title

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1. Introduction

As an NHS Community Infection Prevention and Control (IPC) Team based in North Yorkshire, our aim is to support domiciliary care staff in promoting best practice in infection prevention and control. This Workbook complements a range of educational infection prevention and control resources which can be viewed at www.infectionpreventioncontrol.co.uk.

This Workbook is intended to be the foundation for best practice for infection prevention and control. By applying the principles within the Workbook, you will demonstrate commitment to high quality care and patient safety. *The Health and Social Care Act 2008: Code of Practice on the prevention and control of infections and related guidance (The Code of Practice)*, Department of Health, July 2015, states *"Good* infection prevention and control is essential to ensure that people who use health and social care services receive safe and effective care*"*.

This Workbook is suitable for a wide range of staff providing care at home, such as, domiciliary and rehabilitation teams who undertake personal care or assist with daily living activities. It is designed to be undertaken in stages and each 'Test your knowledge' section should be completed before moving on to the next section. On completion, your manager will check that you have achieved 100% competency in your infection prevention and control knowledge and sign the 'Certificate of completion'. You should keep the Workbook as evidence of learning and as an on-going reference guide to provide you with easily accessible advice for day-to-day care of service users.

The Workbook is evidence-based using national guidance. Completion of this Workbook also helps your organisation demonstrate compliance with *The Code of Practice* and the Care Quality Commission registration requirements in relation to infection prevention and control training.

When caring for a service user with COVID-19 or any other new emerging infection, staff should refer to current national IPC guidance.

Jill Foster
Director of Infection Prevention and Control/Chief Nurse
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2. Infection prevention and control

Infection prevention and control is a key priority for the Department of Health and Social Care, reinforced with the standards set out in *The Code of Practice* and the Care Quality Commission (CQC) requirements. Infection prevention and control spans the 5 key questions the CQC will be asking about your service: Are you safe? Are you effective? Are you caring? Are you responsive? Are you well-led?

An infection occurs when micro-organisms, such as bacteria and viruses, enter the body and cause damage. These micro-organisms can come from a variety of sources and often take advantage of a route into the body provided by an invasive medical device, e.g. urinary catheter. Some infections can reach the bloodstream (bacteraemia), causing serious or life threatening infection and can result in death.

Infection prevention and control means doing everything possible to prevent infection from both developing and spreading to others. Understanding how infections occur and how different micro-organisms spread is essential to preventing infections.

Healthcare associated infection (HCAI)

The term HCAI refers to infection associated with the delivery of healthcare in any setting, e.g. in a service user's own home, supported living, sheltered housing complex, hospital, care home, GP surgery, dental surgery, health centre. So, a HCAI can affect anyone receiving care at home.

The risk or susceptibility to infection increases when living either permanently or temporarily in a shared care setting, such as supported living or a sheltered housing complex. Some people are more susceptible to a HCAI due to:

- Age – very young or old
- Low immunity - as people get older their immune system diminishes
- Recovering from illness
- Having an underlying condition/disease, e.g. diabetes
- Being under-nourished

The chain of infection

Organism: Micro-organisms, such as bacteria and viruses, e.g. C*lostridioides difficile,* MRSA, Norovirus

Reservoir: A reservoir for the micro-organisms (where the infection comes from), e.g. people, animals, food, contaminated equipment or surfaces

Way out of the reservoir: The way in which micro-organisms leave the reservoir, e.g. coughing, sneezing, diarrhoea, hands touching contaminated equipment or surfaces

Method of spread: The way in which micro-organisms are transmitted, e.g. hands, equipment, airborne, injection, ingestion

Way into the body: The way in which micro-organisms en[ter] the body, e.g. urinary tract, exposed wounds, broken skin, needles[tick] injury, mucous membranes, e.g. eyes, mouth, nose

People at risk: A person's susceptibility to infection is dete[rmin]ed by th[eir] age, well-being, level of immunity, if they have invasive devices [or] ap[plied] medical interventions

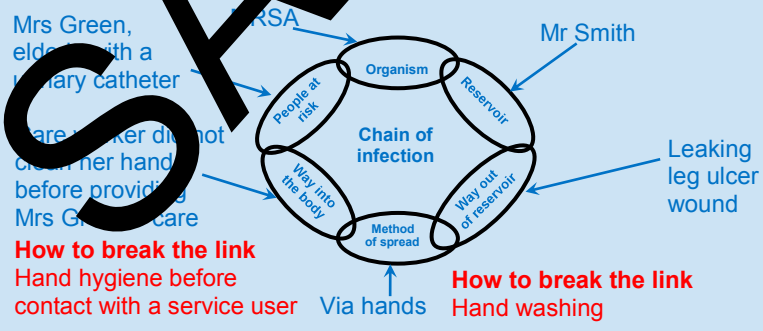
Chain of infection showing how M[RSA] can b[e] spre[ad]

Case study

Mr Smith, 93 years old, has a leg ulc[er] colo[nis]ed with MRSA, which has leaked through the dressing o[n] [his] pyja[mas]. After assisting Mr Smith with washing and getting dressed, t[he] care work[er] then leaves for her next visit without cleaning her hands. She visits her next client and provides catheter care to 89 year old Mrs G[reen] w[ith]out cleaning her hands.

A few days later Mrs G[reen] de[velo]ps symptoms of a urinary tract infection and her urine sample tests positive for MRSA.

Example of how to break the chain of MRSA infection



4. Hand hygiene

Effective hand hygiene decreases the incidence of healthcare associated infection (HCAI) leading to a reduction in patient morbidity (disease) and mortality (death).

Hand hygiene is the single most important way to prevent the spread of infection. Hands may look visibly clean, but micro-organisms, such as bacteria and viruses, are always present, some harmful, some not.

Hands may become contaminated by direct contact with a service user, handling equipment and contact with the general environment.

Removal of micro-organisms is the most important factor in preventing them from being transferred to others.

Hand cleaning methods

The use of liquid soap, warm running water and paper towels, is best practice. This removes dirt, organic matter, e.g. faeces, body fluids, and most micro-organisms acquired through direct contact with a service user or the environment. Bars of soap can harbour micro-organisms, so should not be used.

Ensure all areas of the hands are cleaned thoroughly, using the technique on page 13. If paper towels are not available, the use of kitchen roll or a clean linen towel for use by the carer only and laundered daily is acceptable.

Antibacterial hand soap

Antibacterial hand soaps are not required for routine hand hygiene as they dry the skin which can cause damage.

Alcohol handrub

The use of alcohol handrub offers a practical and acceptable alternative to handwashing in most situations, provided hands are **not visibly** dirty or soiled. It should be applied to all areas of the hands, using steps 2-8 on page 13, until the solution dries. Do not use paper towels to dry.

5. Patient placement and assessment for infection risk (SICP)

Risk categories	
Confirmed risk	A 'confirmed risk' is a service user who has been confirmed by a laboratory test, e.g. Meticillin resistant *Staphylococcus aureus* (MRSA), Multi-resistant Gram -negative bacteria (MRGNB), seasonal influenza, COVID-19, *Clostridioides difficile*
Suspected risk	A 'suspected risk' is a service user who is awaiting a laboratory test result or clinical diagnosis, or those who have been in recent contact/close proximity to an infected person
No known risk	A 'no known risk' is a service user who does not meet either of the criteria above

If the service user is in the 'confirmed' or 'suspected' infection risk group (see risk categories above), the person arranging the transfer should communicate this before the transfer takes place, e.g. by telephone to the transport service at the time of booking and the receiving health or social care provider, to enable them to make the appropriate arrangements.

When transferring a service user who has had diarrhoea of any cause in the last 7 days, staff should ensure they include the infection risk history of the type of stool (see page 57 for Bristol Stool Form Scale) and frequency of bowel movements during the past week.

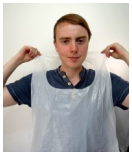
For further guidance on specific infections, refer to your relevant Infection Prevention and Control Policies. Advice can be sought from your local Community Infection Prevention and Control (IPC) or the National Institute for Health Protection (NIHP) Team.

Service users who have a respiratory infection, e.g. COVID-19, should be isolated in their home in line with national infection

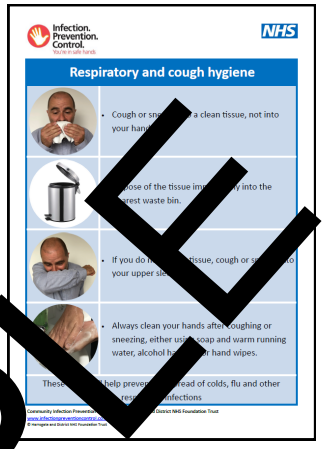
6. Personal protective equipment (SICP)

- Fluid resistant surgical face masks are not routinely required, but will be made available when necessary, e.g. in the event of COVID-19, pandemic flu.
- Hands should be washed or alcohol handrub applied after removing each item of facial protection.

Correct order for putting on and removing Personal protective equipment (PPE)

Order for putting on PPE	Order for removing PPE
 Ensure you are 'Bare Below the Elbows' and hair is tied back. Clean your hands. Pull apron over your head and tie at back of your waist.	 Grasp the outside of the glove with opposite gloved hand. Peel off, holding the removed glove in the gloved hand. Slide the fingers of the ungloved hand under the remaining glove at the wrist and peel off. Discard. Clean hands.
 **Elasticated masks:** Position loops behind ears. **Tied masks:** Position upper straps on the crown of your head, lower straps at the nape of your neck. **For both masks:** With both hands mould the flexible band over the bridge of your nose.	 Break apron strap at the neck, allow the apron to fold down on itself. Break waste straps at your back and fold apron in on itself. Fold or roll into a bundle taking care not to touch the outside surface. Discard. Clean hands.
 Hold on the eye protection by the sides, place over eyes.	 Handle eye protection only by the headband or the sides. Discard disposable eye protection. Reusable eye protection must be decontaminated. See note opposite. Clean hands.
 Put on gloves and extend to cover your wrists.	 **Elasticated masks:** Pull loops over ears. **Tied masks:** Untie or break lower straps followed by upper straps. **Both masks:** Holding only by the loops or straps, discard. Clean hands.

- Dispose of all used tissues promptly into a waste bin and provide service users with a waste bin or plastic bag
- Wash hands with liquid soap and warm running water or use an alcohol handrub after coughing, sneezing, using a tissue
- Provide service users with skin wipes if they are unable to wash their hands
- Keep contaminated hands away from the eyes, nose and mouth



If a disposable tissue is not available, cough or sneeze into your elbow or upper arm, not your hand and not into the air.

A 'Respiratory and cough hygiene' poster can be downloaded at www.infectionpreventioncontrol.co.uk.

Test your knowledge *Please tick the correct answer*	**True**	**False**
1. Good respiratory and cough hygiene is essential to reduce the risk of spreading infections, such as COVID-19, TB.	☐	☐
2. Cover the nose and mouth with a disposable tissue when sneezing.	☐	☐
3. Provide service users with skin wipes if they are unable to wash their hands.	☐	☐
4. If you do not have a tissue available, sneeze into your hand.	☐	☐

8. Safe disposal of waste

All staff are responsible for the safe management and disposal of waste. Waste is potentially hazardous and, if not disposed of correctly, can result in injury or infection.

Good waste management is important to ensure:	
Reduction of health and safety risks from waste	✓
Protection of the environment	✓
Compliance with environmental legislation	✓

Any waste that is generated during the care of a service user, e.g. catheter bags, continence pads, personal protective equipment (PPE), should be disposed of as per local policy. Waste will usually be disposed of as household waste, unless alternative arrangements are in place with the Local Authority.

Disposal of waste

- Appropriate personal protective equipment, e.g. disposable apron and gloves should be worn when handling waste.
- Clean hands after handling waste and after removing each item of PPE, e.g. pair of gloves, apron.
- All waste bags should be no more than 3/4 full and no more than 4 kg in weight. This allows enough space for the bag to be tied securely.
- Avoid expelling air from a waste bag while leaning over it as harmful micro-organisms, such as bacteria and viruses, may be released into the air.
- Make sure all waste is securely bagged and tied, using a suitable plastic tie or secure knot, as pictured.

- Waste should be disposed of as

Dealing with body fluid spillages (not blood/blood stained)

Clean up body fluids, such as urine, faeces and vomit, promptly. The affected area should be cleaned and then disinfected to reduce the risk of infection spreading.

Best practice is to use a chlorine-based solution, such as household bleach, following the manufacturer's instructions on the bottle where available, or prepare as below.

*** See note on page 28 regarding solution use on unsuitable surfaces.**

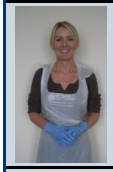
Action for body fluid spillages ***Dilution of 1,000 parts per million (ppm) available chlorine***
Preparation of a household bleach solution: dilution of 1 in 100, e.g. 10 ml of household bleach in 1 litre of cold water.
1. Clean hands and put on disposable apron and gloves.
2. Ventilate the area, e.g. open windows/doors, as fumes will be released from the chlorine.
3. Soak up any excess liquid or clean up any solid material using paper towels, e.g. kitchen roll.
4. Clear away paper towels used for spillage, dispose of by putting in a plastic bag.
5. With a disposable cloth, clean the area with detergent and warm water followed by the household bleach solution, then leave to dry or dry with paper towels.
6. Dispose of cloth and paper towels in the plastic bag.
7. Remove gloves and wash hands, remove apron. Dispose of in the plastic bag, tie the plastic bag and place into the waste bin.
8. Wash hands with liquid soap and warm running water, rinse and dry thoroughly to prevent the transmission of infection.

Note

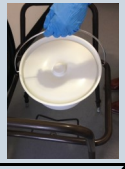
- Clean hands after removing each item of personal protective equipment, e.g. pair of gloves, apron.

Cleaning a commode pan

- Always use disposable cleaning cloths and dispose of after use or when contaminated as household waste.
- Always use 1,000 ppm chlorine-based disinfectant solution, e.g. 10 ml of household bleach in 1 litre of cold water.
- Always replace pans when scratched, stained or the handle is rusted.



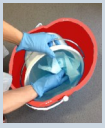
1. Wash hands thoroughly with liquid soap and warm running water, dry with paper towels and dispose of. Then put on disposable apron and gloves.



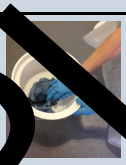
2. Carefully remove the pan from commode to avoid spilling the contents.

3. Transfer the covered commode pan to the toilet to empty, clean and disinfect. Empty the contents into the toilet.

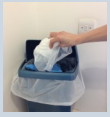
4. Place the pan into a bucket of detergent and water.



5. Wash the outside then inside of the pan and dry with disposable paper towels. Dispose of cloth and paper towels.



6. Wipe the outside then inside of the pan with the chlorine-based disinfectant solution. Leave to air dry. Dispose of cloth.



7. Remove and dispose of gloves, clean hands, then remove and dispose of apron.

8. Wash hands thoroughly with liquid soap and warm running water.

Test your knowledge *Please tick the correct answer*	**True**	**False**
1. Cleaning is a process that destroys or removes all micro-organisms.	☐	☐
2. Single patient use equipment must be disposed of after one use.	☐	☐
3. Equipment should be cleaned prior to being disinfected.	☐	☐
4. Commode pans should be disinfected with 1,000 ppm household bleach.	☐	☐

11. Safe management of linen

Used laundry, e.g. service user's linen (sheets, bedding, towels), clothing, and staff uniforms or workwear, can be soiled with urine, faeces or other body fluids and micro-organisms, such as bacteria and viruses. Care should be taken to reduce the risk of spreading infection when handling used linen.

Handling used linen and clothing

- Disposable apron and gloves should be worn when handling used, soiled or infected linen and clothing.
- Do not shake used linen when making or stripping beds as micro-organisms will be dispersed into the air and contaminate the environment. Instead, fold sheets towards and roll up to avoid spreading micro-organisms.
- After handling used laundry, ensure that hands are washed after removing each item of PPE, e.g. pair of gloves, apron.

Laundering service user's linen and clothing

- To reduce the risk of transmission of infection, staff should not rinse soiled bedding and clothing by hand as this may cause splashing of body fluids onto the skin or into the eyes, nose or mouth. Items should be washed on a pre-wash cycle in the service user's washing machine or communal washing machine at the highest temperature stated on the wash care label.
- If the washing machine and drier are in the kitchen, do not sort laundry and prepare food at the same time.

Staff uniforms or workwear

- A clean uniform or workwear should be worn daily.
- Uniforms or workwear are a potential reservoir for micro-organisms and a possible source of infection.

Procedure following a splash or inoculation injury

In the event of a splash injury to eyes, nose or mouth:

1. Rinse affected area thoroughly with copious amounts of running water

In the event of a bite or skin contamination:

1. Wash affected area with liquid soap and warm running water, dry and cover with a waterproof dressing

In the event of a needlestick/sharps injury:

1. Encourage bleeding of the wound by squeezing under running water (do not suck the wound)
2. Wash the wound with liquid soap and warm running water and dry (do not scrub)
3. Cover the wound with a waterproof dressing

In all cases:

4. Report the injury to your manager imm iately

If the injury is caused by a used sharp or s rp of u known origin, splash to non-intact skin mu us m mb ne or a bite has broken the skin:

5. Immediately contact your GP Occ ational Health department. Out of nor l office urs, attend the nearest Accident and Emergency E) dep tment
6. If you have had a needlest k o harps injury from an item which has been d on a s vice er (source), the GP in charge of their ca may ke blood sample from the patient to test for hepatitis B, h atitis C nd HIV (following counselling and agre nt of the s ice user)
7. At the GP Practic cupational Health/A&E department:

- A blood sa le will be taken from you to check your hepatitis B nation/a body levels and you will be offered immuno-globulin if they re low. The blood sample will be stored until res are vailable from the service user's blood sample. If the ource of th sharps injury is unknown, you will also have blood samples ken at 6, 12 and 24 weeks for hepatitis C and HIV
- If the service user (source) is known or suspected to be HIV positive, you will be offered Post Exposure HIV Prophylaxis (PEP) treatment ideally **commencing within 1 hour of the injury,** but not recommended beyond 72 hours post-exposure

13. Safe management of the care environment

Best practice for cleaning	
1. Work from clean to dirty areas	Start cleaning in the cleanest areas and finish in the dirtier areas, e.g. when cleaning the bathroom, leave the toilet until last and use a separate cloth
2. Work from high to low areas	This helps to prevent cross-infection as it stops contamination of clean areas from dirty areas. Clean all surfaces using an 'S' shaped pattern, taking care not to go over the same area twice
3. Leave all surfaces clean and dry	It is important to leave cleaned surfaces as dry as possible. This helps to prevent mould and bacterial growth
4. Change cleaning solutions and cloths often	One of the main causes of contamination is the use of one cloth for all cleaning. Change the cleaning solution and cloth when it looks dirty so that you are removing dust and dirt and not just moving it from one area to another. Separate cloths should be used for cleaning bathrooms and toilets. These cloths should **not** be used to clean other areas, e.g. kitchen
5. Wash your hands often	Dirty hands and dirty gloves contaminate clean surfaces. Wash your reusable domestic gloves after use and then wash your hands

Test your knowledge *Please tick the correct answer*	**True**	**False**
1. Wash and leave cloths to air dry after each use.	☐	☐
2. Disposable gloves should be worn when cleaning toilets.	☐	☐
3. Separate cloths should be used for cleaning kitchen and toilets/bathrooms.	☐	☐
4. Dirty hands and dirty gloves contaminate clean surfaces.	☐	☐

14. Specimen collection

All specimens are a potential infection risk. Therefore, all specimens must be collected using standard infection control precautions. Specimens should be transported in a sealed bag provided by the GP, or use a rigid container, see note on page 42.

Taking routine specimens **should be avoided** to help reduce inappropriate prescribing of antibiotic treatment. Specimens should only be taken if there are signs of a clinical infection (see indications in table below).

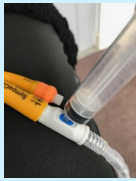
Urine and faeces specimen collection

- Wash hands before and after specimen collection.
- Wear appropriate personal protective equipment.
- Specimen containers must be labelled correctly, including service users' name, date of birth and date taken.
- Specimens should be taken to the GP surgery in the correct specimen container as soon as possible after collection and within 24 hours.
- Do not store specimens in the service user's fridge.

Specimen	Indication	Container
Urine	Pain on passing urine, increase in frequency, blood, fever, unusual incontinence, new confusion	Universal container with boric acid (red top) which prevents bacteria from multiplying in the container 
Faeces (poo)	Diarrhoea, increase in frequency, presence of blood, abdominal pain	Blue top 'stool' specimen container 

Specimen collection

Collect a mid-stream or 'clean catch' specimen. If the service user is catheterised, a sample should be taken from the sample port, not from the drainage tap. Send a sample **before** starting antibiotics. Use a specimen container with boric acid (red top) as it preserves bacterial numbers for up to 72 hours. Fill with urine to the 'fill line' on the container.



Colours 1-3 suggest normal urine	
	1. Clear to pale yellow urine suggests that the service user is well hydrated
	2. Light/transparent yellow urine suggests an ideal level of hydration
	3. A darker yellow/pale honey coloured urine suggests that the service user may need to hydrate soon
Colours 4-8 suggest the service user needs to rehydrate	
	4. A yellow, cloudier urine colour suggests the service user is ready for a drink
	5. A darker yellow urine suggests the user is starting to become dehydrated
	6. Amber coloured urine is not healthy. The service user requires more fluid (all fluids count)
	7. Orange/yellow urine suggests the service user is becoming severely dehydrated
	8. If the urine is this dark, dark red, this, purple or brown, it may not be due to dehydration. Seek advice from the GP

Test your knowledge *Please tick the correct answer*	True	False
1. Offensive smelling urine without other symptoms is not an indication of infection.	☐	☐
2. Routine personal hygiene should be undertaken daily.	☐	☐
3. Encourage service users to drink 2-4 glasses of fluid a day.	☐	☐
4. A yellow, cloudier urine colour suggests the service user is ready for a drink.	☐	☐

16. Urinary catheter care

A urinary catheter is a thin flexible hollow tube that drains urine from the bladder into a drainage bag and is a closed system. The catheter is inserted, by a trained practitioner, into the bladder either through the urethra (genital area) or through a small hole made in the abdomen (suprapubic). The catheter is held in place by a small balloon filled with sterile water. Each time a break is made in the closed system, e.g. changing a catheter bag, it is the opportunity for infection to be introduced.

At least 23% of **all** infections are due to urinary tract infection (UTI) and of those, 80% are due to the use of urinary catheters. All people with a urinary catheter are at increased risk of acquiring a UTI and the longer a catheter is in place the greater the risk.

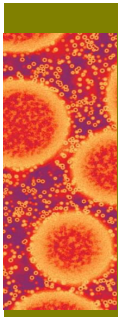
Good infection prevention and control practices are essential to prevent infection. It is also important that the need for a urinary catheter should be reviewed by a practitioner, e.g. District Nurse, GP, on a regular basis.

Catheter hygiene

Routine personal hygiene is all that is required to maintain catheter hygiene such as a daily bath or shower. For people who are unable to bathe or shower, the genital area, including around the catheter, should be washed daily with soap and warm water. For females, it is important to wash the genital area from front to back to prevent contamination from the back passage (rectum).

Emptying a catheter bag

A catheter drainage bag should **not** be emptied more often than necessary as this increases the risk of infection.



17. Viral gastroenteritis/Norovirus

Norovirus is the most common cause of viral gastroenteritis and between 600,000 and 1 million people in the UK are affected every year. Many people refer to it as gastric flu or winter vomiting. Viral gastroenteritis can be airborne, is highly infectious, and can spread easily from person-to-person, therefore, it is important to use infection prevention and control precautions.

What does viral gastroenteritis cause?

Signs of viral gastroenteritis include:

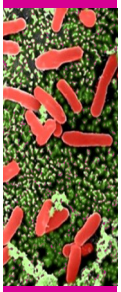
- Sudden onset of diarrhoea* and/or vomiting
- Vomiting - can be projectile (forceful)
- Nausea
- Abdominal/stomach cramps
- Headache and/or low grade fever

Symptoms usually begin around 12-48 hours after being infected with the virus. (*See 'Bristol Stool Form Scale' on page 57 for the definition of diarrhoea.)

Illness is usually of short duration and most people are better within 48 hours with no long-term effects. However, some people, especially the elderly and those with existing long-term illness may have symptoms that last longer.

Why does viral gastroenteritis cause outbreaks?

Viral gastroenteritis often causes outbreaks because it is easily spread from person-to-person and without effective cleaning, the virus is able to survive in the environment for many days. Outbreaks tend to affect people in hospitals, schools, care homes, supported living or sheltered housing complex or where there are a large group of people.



18. *Clostridioides difficile*

Clostridioides difficile (*C. difficile*) is a spore forming bacteria and is a leading cause of infectious diarrhoea.

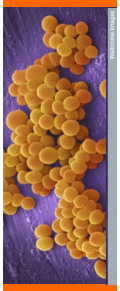
C. difficile is present in the gut of most children and 3-5% of adults.

Our 'good' bacteria (normal flora) keep the growth of *C. difficile* in check. However, when antibiotics are given for an infection, the antibiotics can disturb the balance of bacteria in the gut, killing some of the 'good' bacteria giving *C. difficile* the opportunity to multiply rapidly and produce toxins (poisons). This causes diarrhoea or inflammation of the bowel. At this point, a person is said to be infected with *C.*

The Bristol Stool Form Scale

Definition of diarrhoea: An increased number of more watery or liquefied stools, i.e. types 5, 6 and 7 over within duration of 24 hours. Please remember, after removing gloves, hands must be washed with liquid soap and warm running water when caring for service users with diarrhoea.

THE BRISTOL STOOL FORM SCALE	
Type 1	Separate hard lumps, like nuts (hard to pass)
Type 2	Sausage shaped but lumpy
Type 3	Like a sausage but with cracks on its surface
Type 4	Like a sausage or snake, smooth and soft
Type 5	Soft blobs with clear cut edges (passed easily)
Type 6	Fluffy pieces with ragged edges, a mushy stool
Type 7	Watery, no solid pieces ENTIRELY LIQUID



19. MRSA (Meticillin Resistant *Staphylococcus Aureus)*

MRSA stands for **M**eticillin **R**esistant ***S**taphylococcus **A**ureus*. It is a variety of a common bacteria *Staphylococcus aureus* which lives harmlessly on the skin and in the nose and throat of about 1/3 of people. MRSA is resistant to some of the commonly used antibiotics, e.g. Flucloxacillin.

Where is MRSA found?

MRSA prefers to live in the nose, armpit, groin and wounds of people. It can also be found in the environment in dust and has been found in hospitals and in the community.

How is MRSA spread?

It is usually spread from person-to-person by direct skin contact or by contaminated equipment or surfaces. MRSA can be spread to the next person on hands that have not been washed thoroughly.

MRSA colonisation

People carrying MRSA bacteria on their skin, in their nose or in long-standing wounds such as leg ulcers, who do not have clinical signs of infection, are said to be colonised, but not infected. The MRSA bacteria are simply 'hitching a ride' on the surface of the body without causing an infection or illness and are not usually harmful to healthy people. These people are usually unaware that they are carrying the bacteria. Colonisation may be long-term.

MRSA infection

People can become infected with MRSA when the bacteria enters the body and causes infection, e.g. urine infection, wound infection. It can cause a serious illness such as septicaemia (blood poisoning). Signs of a wound infection include fever, redness, pain, feeling unwell and increased wound discharge. Medical advice should be sought. If infection is present, antibiotic treatment will be prescribed

20. MRGNB (Multi-resistant Gram-negative bacteria) including Extended-Spectrum Beta-Lactamase (ESBL)

Bacteria which are normally found in the bowel include E. Coli, Klebsiella, Pseudomonas, Enterobacter and Proteus. Collectively, these bacteria are referred to as Gram-negative bacilli (GNB) and are part of our 'good' bacteria (normal flora). They can also be found in the environment, in water, soil, on hands of staff, and medical equipment, such as walking frames.

In some people, these bacteria have develop[ed] resist[ance] to many commonly used antibiotics. These are c[alled] multi-resistant Gram-negative bacteria (MRGNB) which [are] resistant to antibiotics and can pass on their resistanc[e] to other types of bacteria. New MRGNB k[nown] as CPE have been identified (see page 65).

When MRGNB cause an infe[ction], e.g. urine, c[hest], wound infection, they can be very dif[ficult] to treat due to their resistance to many antib[iotics].

How is MRGNB spread?

They can be pass[ed] to other peop[le] by direct contact on hands, or by conta[minated] surfaces or equipment. MRGNB can then be transferr[ed] into w[ounds] or other body entry sites, e.g. urinary [cath]eters.

Service use[rs] wit[h] MRGNB

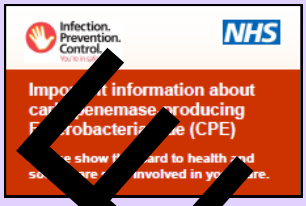
Most people w[ith] MRGNB are colonised (a colonised person is [said] to be a 'carrier') and do not have any symptoms of infection [and] do not require antibiotic treatment. If a service u[ser] has sym[ptoms] of an infection causing a urine, chest or wound infec[tion], antibiotic treatment will be prescribed.

Preventing the spread of MRGNB

Standard infection control precautions must be applied. For full guidance and advice refer to your local policy.

many hospitals in the UK. Screening (testing) of patients or service users at increased risk of CPE, has been implemented nationally in hospitals resulting in cases being identified. Screening is not routinely required in a community

Note



- There are a number of local initiatives across the country where service users found to be positive for CPE either colonised or infected, should have been given advice about CPE and a CPE card. The card should be shown to he providers involved in their ca For further details visit www.infectionpreventioncontrol. uk.
- If required, complete transfer ocum tion (page 15).

Remember

- Using standard in ct n con l precautions will minimise the spread of CPE nd should be rigorously implemented.

Test your k owledge *Pleas the correct an er*	True	False
1. C E are ria resistant to powerful ant s.	☐	☐
2. Most ople with CPE are infected.	☐	☐
3. Cl ing the toilet seat lid before flushing duces possible spread of CPE.	☐	☐
4. Standard infection control precautions minimises the spread of CPE.	☐	☐

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