



Llywodraeth Cymru
Welsh Government

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Code of Practice for the Prevention and Control of Healthcare Associated Infections

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CODE OF PRACTICE FOR THE PREVENTION AND CONTROL OF HEALTHCARE ASSOCIATED INFECTIONS

1. Introduction

1.1 The NHS in Wales is committed to zero tolerance of preventable healthcare associated infections (HCAIs). NHS organisations in Wales have made significant improvements in reducing HCAIs in recent years, including *Meticillin resistant Staphylococcus aureus (MRSA)* bloodstream infections and infections caused by *Clostridium difficile*; however more can and must be done to protect service users and achieve world class standards of service user safety. Effective infection prevention and control needs to be *everybody's business* and must be integral to everyday healthcare practice and based on the best available evidence.

1.2 The Code of Practice (from hereon in referred to as the Code) builds on the 2011 *Welsh Government Commitment to Purpose – Eliminating preventable healthcare associated infections (HCAIs) A framework of Actions for healthcare organisations in Wales*.¹ It sets out the minimum necessary infection prevention and control (IPC) arrangements for NHS healthcare providers in Wales. The nine elements set out below represent standards that organisations will be expected to meet in full across the range of healthcare services that they provide. Compliance with these standards should be evident to service users, visitors, staff and to the Welsh Government including Healthcare Inspectorate Wales. Non-NHS providers of healthcare in Wales may refer to the requirements of the Code to inform the appropriate standards for IPC in their organisations and the services they provide.

¹ [Framework of actions](#)

1.3 It should be emphasised that the requirements of the Code will reinforce and codify existing expectations of NHS healthcare organisations, rather than introduce new expectations.

2. Scope

- 2.1 For the purpose of the Code, HCAs refer to infections that occur as a result of contact with the healthcare system in its widest sense – from care provided in the home; to general practice; nursing home care and care in acute hospitals; or which is acquired by a healthcare worker in the course of their NHS Wales duties.
- 2.2 The Code applies to all NHS healthcare organisations (Health Boards and Trusts) in Wales and to all services provided in both primary and secondary care. For those organisations that do not provide in-patient services, the relevant sections of the Code apply. In addition NHS healthcare organisations must ensure that when they contract or commission services the requirements of this Code are reflected clearly within contracts and commissioning arrangements.
- 2.3 Non-NHS providers of healthcare may refer to the requirements of the Code to inform the appropriate standards for IPC in their organisations and the services they provide.
- 2.4 The Code makes reference to both antimicrobial stewardship and the decontamination of medical devices. The Welsh Government will bring forward further, separate guidance documents, in both these areas which will complement this Code and existing policy documents such as the *Framework of Actions*.
- 2.5 The Code does not replace the requirement to comply with legislation that applies to healthcare services, for example *The Health and Safety at Work etc Act 1974*; the Control of Substances Hazardous to Health (CoSHH) Regulations 2002; and relevant food safety legislation.
- 2.6 Evidence of compliance with the standards in the Code will in some areas include meeting necessary extant standards, such as those described in Welsh Health Technical Memoranda and other technical standards as well as national standards of cleanliness in healthcare facilities.

3. The Standards

3.1 The nine standards are given here, details of how to assess compliance with these standards is given in sections 4.1 to 4.9.

Standard 1:	Appropriate organisational structures and management systems for IPC must be in place.
Standard 2:	The physical environment should be maintained and cleaned to a standard that facilitates IPC and minimises the risk of infection.
Standard 3:	Suitable and accurate information on infections must be made available to service users, their visitors and the public.
Standard 4:	Suitable, timely and accurate information on infections must be provided to any person concerned with providing further support or nursing/medical care when a service user is moved from one organisation to another or within the same organisation.
Standard 5:	All staff employed to provide care in all settings are fully engaged in the process of IPC.
Standard 6:	Adequate isolation facilities are provided to support effective IPC.
Standard 7:	Policies on IPC must be in place and made readily accessible to all staff.
Standard 8:	So far as is reasonably practicable, staff are free of and is protected from exposure to infections that can be acquired or transmitted at work.
Standard 9:	All staff are suitably trained and educated in IPC associated with the provision of healthcare.

4. Criteria for compliance

- 4.1 NHS Wales organisations will need to demonstrate compliance with the essential criteria for each standard as a minimum. Compliance with these criteria should be seen as the foundation on which to build high quality and innovative systems of infection prevention and control.

Standard 1: Appropriate organisational structures and management systems for IPC must be in place.

Criteria for compliance:

An NHS Wales body must ensure that it has in place appropriate arrangements for, and in connection with, allocating responsibility to staff, contractors and other persons concerned in the provision of healthcare in order to protect service users from the risks of acquiring HCAs. In particular, these arrangements must include:

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| <ul style="list-style-type: none">• a Board level statement outlining its collective responsibility for minimising the risks of infection and the general means by which it prevents and controls such risks;• the mechanisms by which the Board intends to ensure that adequate resources are available to secure the effective IPC of HCAs. These should include implementing an appropriate assurance framework², IPC programme³, antimicrobial stewardship programme and IPC infrastructure⁴;• ensuring that relevant staff, volunteers, contractors and other persons whose normal duties are directly or indirectly concerned with service user care receive suitable and sufficient training, information and supervision on the measures required for IPC and where relevant, on antimicrobial stewardship; and• ensuring that responsibility for IPC including antimicrobial stewardship is effectively devolved to; all professional groups in an NHS Wales organisation and; clinical specialities, clinical and non-clinical directorates and all similar groups. |
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<p>² Activities to demonstrate that infection prevention and control are an integral part of quality assurance should include:</p>

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| <ul style="list-style-type: none">• regular reports and presentations from the HCAI Lead to the board. These should include a trend analysis for infections and compliance with audit programmes;• regular and frequent reporting on HCAI and related issues to the Board from clinical directorates and similar groups;• regular reporting to the Board about antimicrobial stewardship;• a review of statistics on incidence of alert organisms (for example, but not limited to, Meticillin-resistant <i>Staphylococcus aureus</i> (MRSA) and <i>Clostridium difficile</i>) and conditions, outbreaks and serious untoward incidents;• evidence of appropriate action taken to deal with occurrences of infection including, where applicable, root cause analysis;• an audit programme to ensure that policies have been implemented; and |
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- an annual report by the HCAI lead on the state of HCAI in the organisation which is made available to the public.

³ The infection prevention and control programme should:

- set objectives that meet the needs of the organisation and ensure the safety of service users;
- identify priorities for action;
- provide evidence that relevant policies have been implemented to reduce infections; and
- report progress against the objectives of the programme in the IPC annual report.

⁴ An infection prevention and control infrastructure should encompass:

- an Infection Prevention and Control Team (IPCT) consisting of an appropriate mix of both nursing and medical expertise (with specialist training and expertise in infection prevention and control) and appropriate administrative and analytical support, including adequate information technology.
- a named lead nurse for infection prevention and control and a named lead doctor (infection prevention and control doctor);
- appropriate expertise and capacity in antimicrobial stewardship
- a governance and reporting structure that actively and demonstrably supports and encourages 'Board to Ward to Board' communication of HCAI risk and information; and
- access to a fully accredited microbiology laboratory service that adheres to the All Wales Standard Operating Procedures (or equivalent) for testing and screening of specimens relevant to HCAs.

An NHS Wales body must:

- have made a suitable and sufficient assessment of the risks to the person receiving care or accessing the service with respect to prevention and control of infection;
- identified the steps that need to be taken to reduce or control those risks;
- recorded its findings in relation to the first two points;
- implemented the steps identified; and
- put appropriate methods in place to monitor the risks of infection to determine whether further steps are needed to prevent or control infection.

Standard 2: The physical environment should be maintained and cleaned to a standard that facilitates IPC and minimises the risk of infection.

Criteria for compliance: An NHS Wales body must, with a view to minimising the risk of HCAs, ensure that:

- there are policies for the environment⁵ that make provision for liaison between the members of the IPCT and the persons with overall responsibility for estates and facilities management;

⁵ Policies should address but not be restricted to:

- cleaning services;
- building and refurbishment, including air-handling systems;
- waste management;
- laundry arrangements for used and infected linen;
- planned preventative maintenance;
- pest control;
- management of drinkable and non-drinkable water supplies;
- minimising the risk of Legionella, Pseudomonas and other water related issues by establishing a Water Safety Group that ensures through its Water Safety Plan adherence to national guidance; and
- food services, including food hygiene and food brought into the care setting by service users, staff and visitors.

- it designates lead managers for environmental cleaning and decontamination of equipment used for treatment;
- all parts of the premises in which it provides healthcare are suitable for the purpose, kept clean and maintained in good physical repair and condition;
- the cleaning arrangements⁶ detail the standards of cleanliness required in each part of its premises and that a schedule of cleaning frequencies is readily available;

⁶ The arrangements for cleaning should include:

- clear definition of specific roles and responsibilities for cleaning;
- clear, agreed and available cleaning schedules;
- sufficient resources dedicated to keeping the environment clean and fit for purpose details of how staff can request additional cleaning, both urgently and routinely; and;
- a system for monitoring compliance with cleaning standards.

Criteria for compliance cont:

- there are effective arrangements for the appropriate decontamination of instruments and other equipment⁷;
- there is adequate provision of suitable hand hygiene facilities;
- the supply and provision of linen and laundry reflect *Health Service Guidance (HSG) (95)18 Hospital Laundry Arrangements for Used and Infected Linen*, as revised [currently under review in Wales] from time to time; and
- uniform and dress code policies ensure that clothing worn by staff when carrying out their duties is clean and fit for purpose. Uniform and dress code policies should specifically support good hand hygiene.

⁷ The decontamination lead should have responsibility for ensuring that a decontamination programme is implemented in relation to the organisation and that it takes proper account of relevant national guidelines. The decontamination programme should demonstrate that:

- decontamination of reusable medical devices takes place in appropriate dedicated facilities;
 - devices designated as single use are never re-used
 - appropriate procedures are used for the acquisition and maintenance of decontamination equipment;
 - staff are trained in decontamination processes and hold appropriate competencies for their role; and
 - there is a monitoring system in place to ensure that decontamination processes are fit for purpose and meet the required standard.
- NOTE: Welsh Government will be bringing forward a separate Decontamination Action Plan that will complement this Code and existing policy.

Standard 3: Suitable and accurate information on infections must be made available to service users, their visitors and the public.

Criteria for compliance: Areas relevant to the provision of such information include:

- general principles on IPC and key aspects of the organisation's policy on IPC, which takes into account the communication needs of the service user;
- the roles and responsibilities of particular individuals such as carers, relatives and advocates in IPC, to support them when visiting service users;
- supporting service users' awareness and involvement in the safe provision of care;
- the importance of compliance with local policy on visiting in hospital as it relates to IPC;
- reporting failures of hygiene and cleanliness;
- explanations of incident/outbreak management; and
- publication of accurate, useful and relevant information and data relating to HCAs in an open and transparent manner.

Information should be developed with local service user representative organisations e.g. Community Health Councils.

Criteria for Standard 4: Suitable, timely and accurate information on infections must be provided to any person concerned with providing further support or nursing/ medical care when a service user is moved from one organisation to another or within the same organisation.

Criteria for compliance

An NHS Wales body must ensure that it provides suitable and sufficient information on a service user's infection status whenever it arranges for that service user to be moved from the care of one organisation to another, or within an organisation⁸, so that any risks to the service user and others from infection may be minimised, including;

- accurate information is communicated in an appropriate and confidential manner;
- this information facilitates the provision of optimum care, minimising the risk of inappropriate management and the transmission of infection; and
- where possible, information accompanies the service user.

⁸ There must be evidence of joint working between the IPCT, bed managers/service user access teams and domestic and facilities services in planning service user admissions, transfers, discharges and movements between departments and other healthcare facilities. Where necessary, the Welsh Ambulance Service NHS Trust will need to be involved in such planning.

Standard 5: All staff employed to provide care in all settings are fully engaged in the process of IPC.

Criteria for compliance:

NHS Wales bodies must ensure that:

- so far as is reasonably practicable, its staff, contractors and others involved in the provision of care co-operate with it, and with each other, so far as is necessary to enable the organisation to meet its obligations under the Code;
- IPC, as it relates to their role, is included in the job descriptions and included in the induction programme and staff updates of all employees (including volunteers);
- contractors working in service user areas are aware of any issues, relevant to their role, with regard to IPC and obtain *permission to work*. Confidentiality must be maintained by all those with access to service user information;
- where staff undertake procedures, which require skills such as, for example, aseptic technique, staff are trained and demonstrate competency before being allowed to undertake these procedures independently; and
- Staff are aware of their responsibilities with regards to vaccine preventable diseases and how they can protect themselves and service users. (See Standard 8).

Standard 6: Adequate isolation facilities are provided to support effective IPC.

Criteria for compliance:

- An NHS Wales body should ensure that it is able to provide, or secure the provision of, adequate isolation precautions and facilities, as appropriate, sufficient to prevent or minimise the spread of infection. This may include facilities in a day care setting and unscheduled care settings;
- Policies should be in place for the allocation of service users to isolation facilities, based on a local risk assessment and with escalation processes described clearly. The assessment must include consideration of the need for special ventilated isolation facilities;
- Isolation facilities with special ventilation should be functioning in compliance with extant national guidelines; and
- Sufficient suitably trained staff should be available to care for the service users safely whilst in isolation.

Standard 7: Policies that will help IPC must be in place and made readily accessible to all staff.

Criteria for compliance:

An NHS Wales body must, in relation to preventing and controlling the risks of HCAs, have in place the appropriate core policies⁹:

⁹ The exact titles and structure of the suite of policies need not be prescribed provided they cover the essential elements as listed.

The appropriate core policies must address:

- standard IPC precautions;
- management of occupational exposure to infectious organisms including Blood Borne Viruses (BBVs) and post-exposure prophylaxis;
- aseptic technique;
- major outbreaks of communicable infection (which make reference to the *Wales Outbreak Plan*);
- transmission based precautions (including isolation precautions);
- safe handling and disposal of sharps;
- prevention of occupational exposure to BBVs, including prevention of sharps injuries;
- outbreak and incident management including closure of wards, departments and premises to new admissions (including presumed or confirmed viral gastroenteritis);
- decontamination policy (including use of disinfectants, single-use equipment and decontamination of re-usable medical equipment)¹⁰;

¹⁰ Welsh Government will be bringing forward a separate Decontamination Action Plan that will complement this Code and existing policy.

- antimicrobial prescribing and stewardship¹¹;

¹¹ An all Wales action plan addressing antimicrobial usage and resistance will be brought forward that will complement this Code and existing policy and support Wales's response to the UK Antimicrobial Resistance Strategy.

- the reporting of HCAs to mandatory national surveillance schemes and as *serious adverse incidents* or *no surprises* as appropriate¹²; and

¹² Putting Things Right, Welsh Government. Version 2, April 2012.

- control of infections with specific alert organisms, taking

account of local epidemiology and risk assessment. These infections must include, as a minimum, *MRSA*, *Clostridium difficile*, Multi-Drug Resistant Organisms (MDROs) and transmissible spongiform encephalopathies. *MRSA* may be included within MDROs or may be separate; such policy should include provision for Carbapenem Resistant Enterobacteriaceae.

Policies must be kept up to date and adherence to policy audited regularly as part of an ongoing audit programme; and audit results should be fed back in a timely manner; examples of good practice shared; and action taken when needed to correct poor practice.

Standard 8: So far as is reasonably practicable, staff are free of and is protected from exposure to infections that can be acquired or transmitted at work.

Criteria for compliance:

NHS Wales bodies should ensure that policies and procedures are in place in relation to IPC such that:

- all staff can access occupational health services^{13 & 14} or access appropriate occupational health advice;

¹³ Occupational health services for staff should include:

- risk-based screening for communicable diseases and assessment of immunity to infection after a conditional offer of employment and ongoing health surveillance;
- offer of relevant immunisations; and
- having arrangements in place for regularly reviewing the immunisation status of staff and providing vaccinations to staff as necessary in line with Immunisation against infectious disease (*The Green Book*) and other UK/Welsh Government guidance.

¹⁴ Occupational health services in respect of BBVs should include:

- having arrangements for identifying and managing healthcare staff infected with hepatitis B or C or HIV and advising about fitness for work and monitoring as necessary, in line with UK/Welsh Government guidance;
 - liaising with the UK Advisory Panel for Healthcare Workers Infected with BBVs when advice is needed on procedures that may be carried out by BBV-infected staff, or when advice on service user tracing, notification and offer of BBV testing may be needed;
 - a risk assessment and appropriate referral after accidental occupational exposure to blood and body fluids; and management of occupational exposure to infection, which may include provision for emergency and out-of-hours treatment, possibly in conjunction with accident and emergency services and on-call infection prevention and control specialists.
- occupational health policies on the prevention and management of communicable infections in staff are in place;
 - decisions on offering immunisation should be made on the basis of a local risk assessment as described in Immunisation against infectious disease (*The Green Book*). Employers should make vaccines available free of charge to employees if a risk assessment indicates that it is needed (COSHH Regulations 2002); and
 - there is a record of relevant immunisations.

Standard 9: All staff are suitably trained and educated in IPC associated with the provision of healthcare.

Criteria for compliance:

- The principles and practice of IPC are included in induction and training programmes for all new staff.
- there is appropriate ongoing education for existing staff (including support staff, volunteers, agency/locum staff and staff employed by contractors), which should incorporate the principles and practice of IPC;
- the organisation has a documented training and education delivery plan;
- there is a record of training and updates for all staff; and
- the responsibilities of each member of staff for IPC are reflected in their job description and in any personal development plan or appraisal.

5. Glossary

Air-handling systems	Engineering systems to provide general and specialist ventilation in healthcare premises.
Alcohol based hand rub (ABHR)	A gel, foam or liquid containing alcohol that is rubbed into the hands as an alternative to washing hands with soap and water.
Alert organism	An organism that is identified as being potentially significant for infection prevention and control practices. Examples of alert organisms include Meticillin Resistant <i>Staphylococcus aureus</i> (MRSA), <i>Clostridium difficile</i> (C.diff) and group A <i>Streptococcus</i> .
Antimicrobial	An agent that kills microorganisms, or prevents them from growing. Antibiotics and disinfectants are antimicrobial agents.
Antimicrobial Stewardship	A coordinated program that promotes the appropriate use of antimicrobials (including antibiotics), improves patient outcomes, reduces microbial resistance, and decreases the spread of infections caused by multidrug-resistant organisms.
Aseptic technique	A healthcare procedure in which precautions are taken to prevent exposing the patient to microorganisms. This can include the use of sterile gloves and instruments.
Blood Borne Viruses (BBV)	Viruses carried or transmitted by blood, for example Hepatitis B, Hepatitis C and HIV.
<i>Clostridium difficile</i> (C.diff)	An infectious agent (bacterium) that can cause diarrhoea. It is a common HCAI.
Decontamination	Removing, or killing pathogens on an item or surface to make it safe for handling, re-use or disposal by cleaning, disinfection and/or sterilisation
Disinfectant	A cleaning chemical used to remove infectious agents from objects and surfaces.
Disinfection	A process to destroy or remove infectious agents from an object or surface. Disinfection does not normally destroy spores.
Healthcare associated infection (HCAI)	Infections that occur as a result of medical care, or treatment, in any healthcare setting.
Infection	Invasion of the body by infectious agents.
IPC	Infection prevention and control.
Isolation	Physically separating patients to prevent the spread of infection.
MRSA	Strains of the infectious agent (bacterium) <i>Staphylococcus aureus</i> that are resistant to many of the antibiotics commonly used to treat infections.
NLIAH	The former National Leadership and Innovation Agency for Healthcare.
Occupational exposure	Exposure of healthcare workers or care staff to blood or body fluids in the course of their work.
Outbreak	When there are two or more linked cases of the same illness or when there are more cases than the number expected

Post-Exposure Prophylaxis	Taking anti-BBV medications (where they exist, depending on the specific virus) as soon as possible after you may have been exposed to a BBV to try to reduce the chance of becoming infected.
Root Cause Analysis	A framework for reviewing patient safety incidents, identifying their root causes and learning from them.
Sharps	Sharp instruments used in healthcare settings such as needles, lancets and scalpels.
Single-Use	A device used on an individual patient during a single procedure and then discarded. It is not intended to be reprocessed and used again, even on the same patient.
Standard Infection Control Precautions (SICPs)	The minimum infection prevention and control measures necessary to reduce the risk of transmission of microorganisms from both recognised and unrecognised sources of infectious agents that may be present in blood, other body fluids, secretions, excretions, non intact skin and mucous membranes.
Transmission Based Precautions	A set of infection prevention and control measures that should be implemented when patients are known or suspected to be infected with an infectious agent. These should be implemented, as required, in addition to Standard Infection Control Precautions (SICPs) in all care settings.
Viral gastroenteritis	Gastrointestinal illness with symptoms including diarrhoea and/or vomiting where the cause is known or presumed to be a viral infection e.g. Norovirus.
Water Safety Plan	A requirement on all NHS organisations to have a plan for the management of risks from specific water-borne infections such as Legionella and Pseudomonas.

6. References and further reading

6.1 The majority of reference materials and further reading can be accessed via the Welsh Healthcare Associated Infection Programme (WHAIP) Healthcare Associated Infection (HCAI): Guidance Set. Available from the WHAIP (Public Health Wales) internet site at:

<http://www.wales.nhs.uk/sites3/page.cfm?orgid=379&pid=38960>

6.2 The contents of this guidance set include links to:

- Antimicrobial Prescribing
- Built environment (including Welsh Health Technical Memoranda)
 - Waste
- Decontamination/Single-use
- Clinical Practice
 - Catheter associated urinary tract infection (CAUTI)
 - Central venous catheters
 - Outbreaks
 - Peripheral vascular catheters
 - Standard precautions
 - Surgical site infection
- Organism/disease/agent specific
 - *Clostridium difficile*
 - Creutzfeldt-Jakob Disease (CJD or vCJD)
 - Group A Streptococci
 - Influenza
 - MERS Novel Coronavirus
 - MRSA
 - Multi-drug resistant organisms (MDRO)
 - Norovirus
 - Tuberculosis
- Specific environments
 - Care homes
 - Prisons
- Strategic IPC documents

6.3 Health and Safety Legislation can be accessed via the Health and Safety Executive: <http://www.hse.gov.uk/index.htm>

6.4 Food safety legislation can be accessed via the Food Standards Agency: <http://www.food.gov.uk/wales/>

6.5 Immunisation against infectious disease (The Green Book): <https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book>