



Infection Prevention and Control, Antimicrobial Prescribing and Antimicrobial Stewardship

Guidelines, tools and
educational resources

for

Community Health and Social Care front
line staff, prescribers, pharmacists and
health and social care managers

Version 1 Published July 2024



National Clinical Guideline for Infection Prevention and Control No: 30, Volumes 1 and 2 (2023)

This is a key reference resource for IPC, the first comprehensive national guidance for Infection Prevention and Control in Acute and Community Care Settings:

<https://www.gov.ie/en/publication/a057e-infection-prevention-and-control-ipc/>

The Health Protection Surveillance Centre (HPSC)

The HPSC is part of the HSE and works in partnership with health service providers and sister organisations in Ireland and around the world, to provide the best possible information for the control and prevention of infection and infectious disease. On the website <https://www.hpsc.ie/> the following resources are available:

- ▶ Information, guidelines and reports in relation to an A-Z list of health topics including infections/infectious diseases are available online at: <https://www.hpsc.ie/a-z/>
- ▶ AMRIC Videos showing healthcare workers how to put on and take off PPE are available online at: <https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/primarycareguidance/videoresources/>
- ▶ AMRIC educational webinar recordings about IPC are available online at: <https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/infectionpreventionandcontrolguidance/webinarresourcesforipc/>
- ▶ AMRIC IPC Posters including Standard Precautions, IPC Point of Care Risk Assessment, Gloves, PPE, Hand Hygiene, Respiratory Hygiene and 'When should my child go back to school' are available online at: <https://www.hpsc.ie/a-z/microbiologyantimicrobialresistance/infectioncontrolandhai/posters/>
- ▶ Antibiotic consumption data reports for primary care are available online at: <https://www.hpsc.ie/a-z/microbiologyantimicrobialresistance/europeansurveillanceofantimicrobialconsumptionesac/surveillance-reports/>
- ▶ Infectious disease data and information about how to notify cases and outbreaks of infection is available online at: <https://www.hpsc.ie/notifiablediseases/>
- ▶ Epi-Insight, a monthly HPSC bulletin on infectious disease in Ireland is available online at: <https://www.hpsc.ie/epi-insight/>

The HSE HCAI Website

The website <https://www.hse.ie/hcai/> hosts issues of the AMRIC 'RESIST' Newsletter. The National AMRIC Team publish a quarterly newsletter entitled 'RESIST' which contains information on new developments, guidelines, statistics and interesting articles about Infection Prevention and Control and Antimicrobial Stewardship in both acute and community settings. The newsletter is available online at: <https://www.hse.ie/eng/about/who/healthwellbeing/our-priority-programmes/hcai/european-antibiotics-awareness-day/>



AMRIC E-Learning Resources

The AMRIC HUB on www.hseland.ie can be accessed through the 'Hubs and Resources' tab. Under 'Modules' there are currently 18 AMRIC educational modules listed below:

The AMRIC Hub also contains a 'Resources' Tab with links to the National Clinical Guideline No.30 Infection Prevention and Control and AMRIC Printed Resources and how to order them.

Introduction to IPC and Antimicrobial Resistance	Standard and Transmission-Based Precautions	Cleaning and disinfecting the healthcare environment and patient equipment
Antimicrobial Resistance and Multi Drug Resistant	Hand Hygiene	Clostridioides difficile infection
Antimicrobial Stewardship in Practice	Personal Protective Equipment (PPE)	Management of Blood & Body fluid spills
Aseptic Technique	Respiratory hygiene and cough etiquette	Prevention of Peripheral and Central Venous Catheter-Related Infections
Prevention and management of Urinary Tract Infection	Aseptic technique	Healthcare-Associated Infections (HCAI): An Overview for Managers
Basics of Infection Prevention and Control	Prevention of peripheral and central venous catheter related infections	Outbreak – Prevention and Management
Microbiology and Surveillance		

Printed posters and promotional materials

The National AMRIC Team have produced a number of hard copy posters and leaflets about antibiotics, multi drug resistant bacteria, hand hygiene, gloves, IV lines, respiratory hygiene that are available to order online at www.healthpromotion.ie

To view the materials available, under 'Search for publications' select 'RESIST' from the 'search by topic' drop down list screen as shown in the screen shot below. To order the printed materials, you need to create an account. Information about setting up an account is available online at: <https://www.hse.ie/eng/about/who/healthwellbeing/our-priority-programmes/hcai/resources/ordering-resist-publications/guide-on-how-to-place-an-order-healthpromotion.pdf>

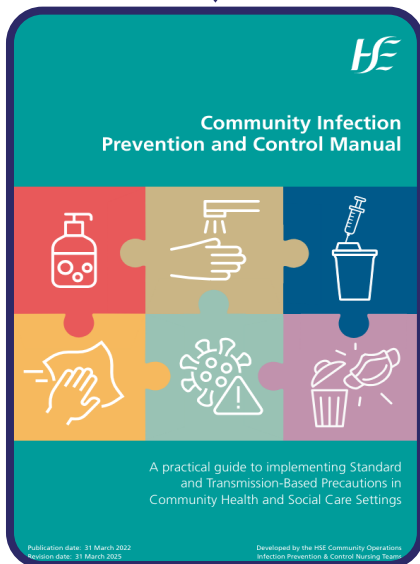
Search for publications

Search by topic: Search by keyword:

HSE Community Infection Control Manual

The HSE Community Infection Control Manual is available online at:

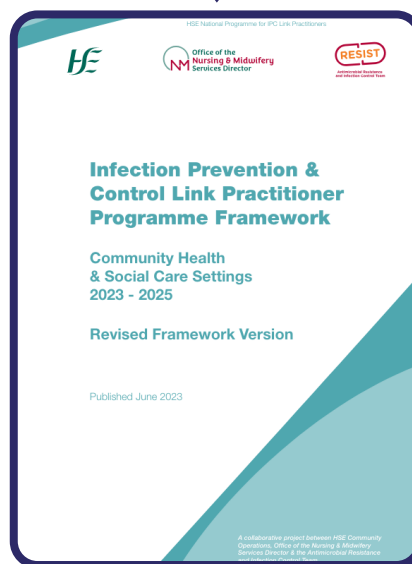
<https://www.lenus.ie/handle/10147/631787>



HSE Community IPC Link Practitioner Programme Framework

The HSE Community IPC Link Practitioner Programme Framework (Updated in 2023) is available online at:

<https://www.lenus.ie/handle/10147/629073>



HSE IPC Educational Workshop for Home Support Workers

HSE Community IPC Nursing teams have developed a three hour workshop and accompanying booklet for home support workers to guide implementation of the principles of infection prevention and control in the home setting.

Please contact communityqps@hse.ie for further information.

Dental and Orthodontic Services

IPC resources for dental and orthodontic services are hosted on HSeLanD and can be accessed through the Discovery Zone on <https://www.hseland.ie>

In the discovery zone healthcare workers can access training videos in relation to reusable invasive device decontamination, the national Guideline for IPC in HSE Dental and Orthodontic Services (2024) and the associated audit tool. The National Guideline for Infection Prevention and Control in HSE Dental and Orthodontic Services can also be accessed through the National Clinical Repository which is available online at:

<https://www2.healthservice.hse.ie/organisation/national-pppgs/hse-national-guideline-for-infection-prevention-and-control-in-hse-dental-and-orthodontic-services/>

Immunisation

Information about immunisation and vaccines is available online at: www.hse.ie/eng/health/immunisation/

Immunisation guidelines for Ireland are available online at: www.rcpi.ie/Healthcare-Leadership/NIAC/Immunisation-Guidelines-for-Ireland

The National Immunisation Office hosts a number of eLearning programmes on HSeLand www.hseland.ie including education about vaccine storage, immunisation schedules; pneumococcal infection, flu, COVID vaccines, Human Papilloma Virus (HPV) and vaccination in pregnancy.

The National Immunisation Office (NIO) has a dedicated platform for comprehensive vaccination information and updates. News bulletins are available online at <https://nio-news.com/>

Sepsis

Information about sepsis is available on the HSE website: <https://www2.healthservice.hse.ie/organisation/sepsis/clinical-resources/>

Health Information and Quality Authority (HIQA)

The website www.hiqa.ie provides access to:

- ▶ HIQA Inspection reports and guidance documents in relation to designated centres for older persons and designated centres for people with disabilities
- ▶ Information and guidance in relation to the monitoring and regulation of health and social care services including assessment/judgment frameworks

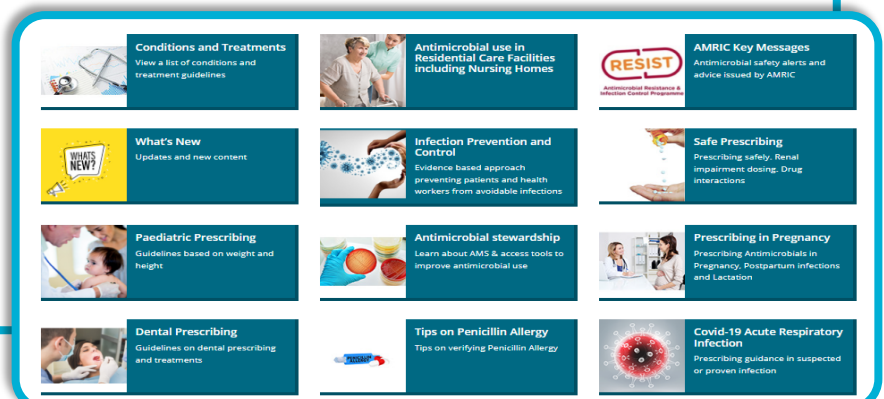
The National Standards for infection prevention and control (IPC) in community services and tools to assist front-line staff and senior management to implement the national standards are available online at: <https://www.hiqa.ie/reports-and-publications/standard/national-standards-infection-prevention-and-control-community>. Resources available include the following:

- An online learning course to learn practical ways that you can apply these standards in your day-to-day work.
- A short animation outlining what infection prevention and control and antimicrobial stewardship are and what measures people and services can take to prevent the spread of infection.
- A one-page summary poster showing the 20 National Standards.
- An information leaflet for people using services on the National Standards. This outlines key messages from the standards and what people using services can do to prevent the spread of infections.

Antimicrobial Stewardship Resources

The HSE website **Antibiotic Prescribing** <https://www.hse.ie/eng/services/list/2/gp/antibiotic-prescribing/> is the primary resource for up to date national community antimicrobial prescribing guidance and antimicrobial stewardship resources. The website contains:

- ▶ Over 100 antimicrobial prescribing guidelines for the treatment of commonly encountered infections in community settings including general practice, dental and orthodontic services and residential care
- ▶ Guidance on antimicrobial use in special populations: pregnancy, children, renal impairment and penicillin allergy
- ▶ Antimicrobial stewardship resources for patients and healthcare professionals
- ▶ Audit tools for UTI prophylaxis, azithromycin prophylaxis and preferred antibiotics <https://www.hse.ie/eng/services/list/2/gp/antibiotic-prescribing/antimicrobial-stewardship-audit-tools/antimicrobial-stewardship-ams-policy-for-your-practice.html>
- ▶ AMRIC key messages on AMS sent every quarter to GPs
- ▶ Dedicated resources for Residential Care Facilities as follows:
 1. Information about the National ‘Skip the Dip for UTI’s in Over 65’s’ Quality Improvement Campaign is available online at <https://www.hse.ie/eng/services/list/2/gp/antibiotic-prescribing/prescribing-ltcf/prescribing-ltcf.html> and includes:
 - A decision aid to help assess which residents would likely benefit from antibiotic treatment when a UTI is suspected
 - Position statements for the use of dipstick urinalysis for assessing evidence of urinary tract infection (UTI) in adults.
 - The ‘Skip the Dip for UTI in Over 65’s’ webinar recording and associated slide deck
 - A staff handbook, resident information leaflet and poster about Skip the Dip
 2. Good Practice Points for Antibiotics <https://www.hse.ie/eng/services/list/2/gp/antibiotic-prescribing/prescribing-ltcf/good-practice-points-v2-0-final-april-2024.pdf>
 3. Frequently asked questions about pneumococcal vaccine
 4. Infographics of key findings and recommendations from national antimicrobial point prevalence surveys of antibiotic use in HSE older persons residential care facilities and in HSE mental health facilities.



Antimicrobial stewardship Guidance for all healthcare settings (2022)

Antimicrobial stewardship (AMS) is an integral component of patient safety, aimed at maximising the benefit of antimicrobials and causing the least harm for the individual service user.

The Antimicrobial stewardship Guidance for all healthcare settings (2022) includes the role of the various healthcare workers in AMS, which include (i) prescribers encompassing doctors, dentists, and nurse/midwife prescribers; (ii) pharmacists; and (iii) nurses and midwives. The guidance includes the governance and structures required to deliver AMS, AMS interventions and advice and guidance on the tools to measure and monitor AMS programmes.

The guidelines are available online at:

<https://www.hse.ie/eng/services/list/2/gp/antibiotic-prescribing/antimicrobial-stewardship-audit-tools/hse-amric-antimicrobial-stewardship-guidance-for-all-healthcare-settings-v1-published-august-2022.pdf>

Antimicrobial Stewardship Educational Resources - Elearning

The AMRIC HUB on www.hseland.ie can be accessed through the 'Hubs and Resources' tab. Under 'Modules' the following educational modules relate to antimicrobial stewardship:

- ▶ Antimicrobial Stewardship in Practice
- ▶ Prevention and management of Urinary Tract Infection
- ▶ Clostridioides difficile infection
- ▶ Antimicrobial Resistance and Multi Drug Resistant Organisms

Resources for Pharmacists

Irish Institute of Pharmacists (IIOIP)

The HSE Antimicrobial Resistance and Infection Control (AMRIC) team and the IIOIP elearning module on antimicrobial stewardship is available to pharmacists through the IIOIP website: <https://iioip.ie/user/login>

Pharmacist Antimicrobial Stewardship Network (PAMS-net)

The HSE Antimicrobial Resistance and Infection Control (AMRIC) team and the Irish Institute of Pharmacists (IIOIP) have collaborated to develop the **Pharmacist Antimicrobial Stewardship Network (PAMS-net)**. The network aims to support pharmacists across all sectors to work towards the common goal of promoting responsible use of antimicrobials in all patients and limiting the emergence of antimicrobial resistance. Pharmacists can join PAMSNet through the IIOIP website.



Resources to support Patients/Service Users

- ▶ The HSE Health Care Associated Infection and Antimicrobial Resistance website contains links to patient information leaflets on topics such as “How to take your antibiotics”, “Be infection aware”, Clostridioides difficile infection and Multi Drug Resistant Organisms and on bacteria including C diff, CPE, ESBL, MRSA and VRE. Translated versions of these leaflets are available in English, Irish, French, Polish, Spanish, Russian and Ukrainian. These patient leaflets are available online at: <https://www.hse.ie/eng/about/who/healthwellbeing/our-priority-programmes/hcai/hcai-amr-information-for-patients-and-public/patient-leaflets/patient-leaflets.html>
- ▶ The HPSC website hosts information leaflets for the general public online at: <https://www.hpsc.ie/publications/informationleafletsforthegeneralpublic/>
- ▶ Printed resources such as patient information leaflets and posters can be ordered online at www.healthpromotion.ie
- ▶ <https://www2.hse.ie/conditions/common-illnesses/> is a self-help website advising service users on how to manage common illnesses.
- ▶ HSE video: Keep antibiotics working for the future is available online at: https://www.youtube.com/watch?v=n_kt2Cmv7Cg
- ▶ HSE video: How to properly wash your hands is available online at: <https://www2.hse.ie/conditions/how-to-clean-your-hands/>



The HSE 2022-2025 AMRIC Action Plan sets out a range of HSE actions aligned to the five strategic objectives of iNAP2

Strategic Objective 1

Improving awareness and knowledge of AMR

Strategic Objective 2

Enhancing surveillance of antibiotic resistance and antibiotic use

Strategic Objective 3

Reducing infection and disease spread

Strategic Objective 4

Optimise the use of antibiotics in human and animal health

Strategic Objective 5

Promote research and sustainable investment in new medicines, diagnostic tools, vaccines and other interventions

All of these strategic objectives have specific HSE actions with associated deliverables that over the period of 2022-2025 will work towards the following in relation to antimicrobial resistance and infection control.



Improved patient outcomes



Improved patient safety



Staff education and training



Improved staff safety



Awareness and deeper understanding

All of the actions in the HSE 2022-2025 AMRIC Action Plan strive to promote

The HSE AMRIC Action Plan 2022-2025 is available online at:

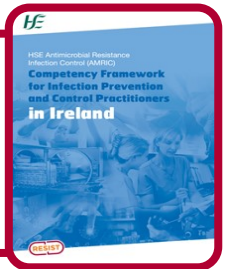
<https://www.hse.ie/eng/about/who/healthwellbeing/our-priority-programmes/hcai/resources/general/hse-antimicrobial-resistance-infection-control-amric-action-plan-2022-2025.pdf>



The competency framework, projects and quality improvement initiatives listed below are some examples of the work undertaken at national level which are aligned to national strategic objectives for the control of antimicrobial resistance.

The HSE Antimicrobial Resistance Infection Control (AMRIC) Competency Framework for Infection Prevention and Control Practitioners in Ireland

The framework outlines the core competencies, knowledge, skills and ability required as an Infection Prevention and Control (IPC) practitioner in Ireland. The framework is available online at: <https://www.hse.ie/eng/about/who/healthwellbeing/our-priority-programmes/hcai/resources/general/competency-framework-for-infection-prevention-control-practitioners.pdf>



The National General Practitioner (GP) Out of Hours (OOH) Antimicrobial Prescribing Project

This is a national project led by the AMRIC Team aimed at improving the quality of antimicrobial prescribing in GP out of hours (OOH) services. This project involves implementation of an antibiotic prescribing audit tool to computer software systems in OOH GP services and provision of reports to facilitate analyses of antibiotic prescribing practice. This project is a scale up of the successful South Doc OOH Service Antibiotic Quality Improvement project (2018 -2021), which led to significant improvement in the quality of antibiotic prescribing in South Doc OOH services.

HSE National Clinical Surveillance Infection Control System

HSE Acute and Community Services, eHealth and the National AMRIC Team are working together to implement an information technology system for Infection and Prevention Control. The introduction of this software will help support surveillance of Healthcare Associated Infections (HCAs). The software system is already utilised in a number of acute hospitals and roll out across remaining acute hospitals and community services is underway.

Green/Red Antibiotic Quality Improvement Initiative for Community Prescribers

The HSE Medicines Management Programme (MMP) together with the Antimicrobial Resistance and Infection Control (AMRIC) Team have developed a preferred antibiotics initiative commonly referred to as the Green/Red antibiotic list.

Antimicrobial prescribing guidelines for community prescribers published online at: <https://www.hse.ie/eng/services/list/2/gp/antibiotic-prescribing/> recommend the preferred use of "green" agents which are effective, have fewer side effects and are less likely to lead to resistant infections than "red" agents. GPs are provided with this list as a mouse-mat (shown) to assist in antibiotic decision making at the point of prescribing. The AMRIC Team collaborates with the Primary Care Reimbursement Service (PCRS) to build on this initiative. GPs (with a GMS list of > 100 patients) receive regular reports on the level of green (preferred) and red antibiotic prescribing and the rate of antibiotic prescribing in comparison to national averages for their GMS cohort. Reports include educational messages to promote best practice in the prescribing of antibiotics. The educational messages are published online at:

<https://www.hse.ie/eng/services/list/2/gp/antibiotic-prescribing/safe-prescribing/key-messages-from-amric-to-community-prescribers.html>

In many cases the Preferred Antibiotic is No Antibiotic
Advise patients/carers to visit the HSE website www.undertheweather.ie for self-care advice for viral and self-limiting infections

Preferred Antibiotics In Community

Respiratory Infections Duration in general: 5 days	Urinary Tract Infections	Skin and Soft Tissue Infections
Amoxicillin	Nitrofurantoin* (Only for lower UTI)	Flucloxacillin
Doxycycline*	Cefalexin	Cefalexin
Penicillin V (phenoxymethylpenicillin)	Trimethoprim*	Doxycycline* (acne)
	Fosfomycin* (Only for lower UTI)	Lymecycline* (acne)

Antibiotics To Be Avoided First Line In Community

Co-amoxiclav Unless as first line for: animal or human bite; facial cellulitis; post partum endometritis; caesarean wound infections; perineal wound infection	Risks: C.diff	Quinolones • Levofloxacin* • Ciprofloxacin* • Ofloxacin* • Moxifloxacin*	Risks: C.diff, drug interactions, tendon/nerve & other toxicities, prolongation of QT interval, lowers seizure threshold – Unless as first line for acute prostatitis – Unless as first line for acute epididymo-orchitis – AVOID due to risk of severe liver toxicity
Other cephalosporins • Cefaclor • Cefixime • Cefuroxime	Risks: C.diff	Macrolides • Clarithromycin* • Azithromycin* • Erythromycin*	Risks: C.diff, drug interactions, prolongation of QT interval – Unless as first line for helicobacter eradication
Clindamycin*	Risks: C.diff		

* These antibiotics may be safely used in patients with true penicillin allergy (immediate hypersensitivity).
C.diff = Clostridioides difficile infection
See www.antibioticprescribing.ie for details

RESIST Version 5, February 2023

IRISH PHARMACY UNION | ICGP | Preferred Drugs | HSE