

Welcome

This is the third RESIST newsletter from the Antimicrobial Resistance and Infection Control Division of HPSC (AMRIC). We will issue an update every quarter to keep you informed on new developments, guidelines, statistics and interesting articles. Thanks for your comments and inputs, if you have any suggestions on content or want further information please contact us on hcai.amrteam@hse.ie

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The Resist Programme kicks off in Cavan and Portlincula hospitals

Are we there yet ? Are we there yet ? Most of us have heard this from the back of the car on long drives over the Summer Holidays. We sit in the front trying to think of ways to refresh everyone and remind everyone that it will be worth it when we get there.

Making sure that every patient gets clean safe care and is protected from side effects for antibiotics they don't need is a long road-trip. The HSE has travelled a long way on the road but we are not there yet. The Resist Programme aims to give a fresh look to key messages about what we need to do and why it will be worth it in the end if we keep each other going for the next mile.

Resist is the new identity for a number of initiatives under the HPSC Antimicrobial Resistance and Infection Control programme (AMRIC). One of these initiatives is a National Hand Hygiene Train the Trainer Programme which is happening in 4 hospital pilot sites. The acute hospital programme promotes a combination of hand hygiene training with standardised national training materials. **Cont'd ...**



Trainers and staff from Portlincula who have joined the Superbug Resistance



Trainers from Cavan Hospital with their certs who helped launch Resist and the Superbug Resistance

Resist launch cont'd

Sheila Donlon, IPCN lead for Cavan says, "Cavan Hospital has a good record in hand hygiene but we are always looking to improve our standards. The Resist programme will help us to do that and we are delighted to have been selected. We have started to roll out the peer to peer training and branding around our hospital and look forward to continuing with the programme."

Helen Lemass, IPCN lead for Portlincula hospital added, "We place great importance on hand hygiene across all services in Portlincula. Cleaning your hands properly, at the correct time, when delivering care to patients, is the most effective way to stop the spread of many common infections. The Resist programme will help us to build on the hand hygiene work that we are doing and give a new emphasis and enthusiasm around our hospital."

Speaking on behalf of the HPSC AMRIC division, Mary McKenna says, "We plan to have the post training evaluations for the 4 pilot sites completed by end of July and will adjust the programme based on feedback. We will then be working with the national acute services division to agree an implementation programme for all hospitals."

The Resist programme will also be rolling out to the community sites. Currently there are over 8,000 staff trained in the community as part of the Train the Trainer programme. We will be looking to roll out the branding and public information to our community services, focussing on residential services. Further information or enquiries to

hcai.amrteam@hse.ie



New Director of Nursing for Infection Prevention and Control



The HSE has appointed Josephine Galway as the first Director of Nursing for Infection Prevention and Control. This is an important development in the role of infection prevention control nursing in Ireland.

Josephine has recently joined the HPSC AMRIC division and will be leading out on the development of an IPCN nursing strategy. She will be working with the rest of the national HPSC AMRIC team to drive an increased focus on the wider issues on the control of healthcare associated infection (HCAI) and antimicrobial resistance (AMR).

Josephine has a long career in nursing and has worked in both community settings and acute services at all levels of nursing and specialities. In recent years Josephine worked in the South East community services (CHO5) as Infection Prevention and Control Clinical Nurse Specialist in Acute, Mental Health, Older persons, and Community Services before taking up the role of Assistant Director of Nursing Older Persons Services.

"I am delighted that I have been appointed to this new and significant role. I know that there will be challenges ahead but I want to bring my experiences working across all the services to help build on the great Infection prevention and control work that is already underway".

"Working closely together we can address the challenges and deliver on Ireland's National Action Plan on Antimicrobial Resistance 2017-2020 with an increased focus on the wider issues of the control of HCAI and AMR."

If you would like to contact Josephine you can reach her at josephine.galway@hse.ie

World Hand Hygiene Day 5th May

Thanks for your support in spreading the message



Hand Hygiene Training event in Ballyconnell, Cavan. In total 62 staff were trained in CHO1 in Cavan, Sligo and Donegal as part of world Hand Hygiene initiatives.



Minister for Health Simon Harris TD and Chief Nursing Officer Dr. Siobhan O'Halloran joining the Superbug Resistance as part of Hand Hygiene week



CHO 8 Louth Louise Coleman section officer, Annette Mc Donnell SAO and Noeleen Hallahan IPCN from Louth Primary Care at their hand hygiene event.



Portiuncula staff highlighting bare below the elbow as part of Hand Hygiene week



IPCN Clinical Nurses Specialists Muthu Saba and Sharon Maher explain the importance & benefits of good hand hygiene practice in Dublin South, Kildare & West Wicklow Community Healthcare



Bernie O'Reilly, from Patients for Patients Safety and a member of the CPE Expert Group shares her Superbug Resistance message

Twitter thank You

Healthcare staff who are Twitter users were encouraged to take part in the campaign, sharing photos of themselves and their colleagues promoting good hand hygiene.

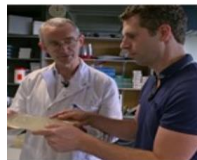
Thanks to everyone who shared good hand hygiene messages across Twitter, Facebook and Instagram in the week leading up to World Hand Hygiene Day.



HSE Ireland

Published by Bronagh McDermott [?] · 3 May at 18:05 ·

This Sunday, May 5th is World Hand Hygiene Day – did you know that washing your hands is an easy way to avoid infections? 🧼



YOUTUBE.COM

So you think your hands are clean?

Watch what happens when clean hands get tested for bacteria. Produced by New Decade TV Ltd

6,162

People reached

94

Engagements

Boost Post

Aghna Harte, Kate Forde and 21 others

9 shares



Liked by Beaumont Hospital and 25 others



1:15 PM · 3 May 2019

26 Retweets 51 Likes



Are we using too many antibiotics in HSE hospitals?

The short answer to that question is that probably we are using too many antibiotics. HSE hospitals are using more antibiotics every year. Antibiotics are priceless when we need them but like every other drug they have side effects so when we don't need them we are safer without them. Ireland is about the middle of the road for countries in Europe in terms of antibiotic use in hospital. However, if we look at the countries in Europe that are doing the best there is no doubt that we could do better and that patients will be better off if we can do better.

The AMRIC Division of the Health Protection Surveillance Centre (HPSC) has prepared a new report on how antibiotics are used in Irish acute hospitals. The report is aimed at healthcare workers who are interested in encouraging best practice in the use of antibiotics. The term antimicrobials is used for drugs that are used to treat all infectious diseases, and antibacterials for those drugs that are used to treat bacterial infections. These drugs have no effect on viral infections, but their overuse can lead to the emergence of resistance among some bacteria that cause serious infectious diseases.

Hospital consumption of antimicrobial agents is measured in defined daily doses (DDD) not in terms of weight of drugs used. The reason for using DDD is because 100mg may be the daily dose for one antimicrobial whereas the daily dose may be as high as 5 or 10 grams for another antimicrobial. So a gram of one antimicrobial is not the same as a gram of a different antimicrobial. The basic idea of DDD then is to count how many doses of antibiotic are used instead of counting grams.

The rate of use is reported as doses per 100 bed-days used by a hospital. This is because hospitals with larger bed numbers are generally likely to use more antimicrobials as they look after more patients. Different hospitals may also differ in terms of antimicrobial use because they care for different kinds of patient.

When considering differences between hospitals and hospital groups it is important to take note of these differences.

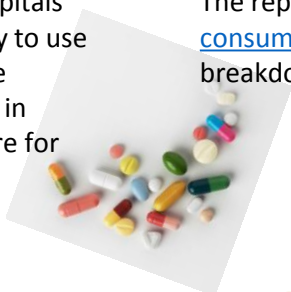
Hospital antimicrobial pharmacists use the HPSC's online tool, MicroB, to upload pharmacy dispensary data files. The software converts this to ATC/DDD values (number of doses) for national and international comparisons. The system also gives detailed ward-level feedback directly for hospital antimicrobial stewardship teams.

The key messages in the data are that hospital antibacterial consumption in Ireland has increased for the third year in a row. Consumption in 2018 in Ireland was mid-range in comparison with other European countries. There is some good news in the report. The reduction in use of fluoroquinolones (for example ciprofloxacin) and carbapenems (for example meropenem) is positive. However, the increase in consumption of penicillin combinations (for example piperacillin-tazobactam) and third-generation cephalosporins (for example cefotaxime), as well as the overall increase, is a concern.

It is important to recognise that there are pressures that tend to increase antimicrobial use. The increase in use may be related to increase in the incidence of some infections (for example *E. coli* blood stream infection is becoming more common) in our aging population. However, there is good reason to believe that there is scope to achieve a substantial reduction in use of antimicrobial agents and at the same time making care safer and less expensive.

The report on [hospital antimicrobial consumption](#) is available on the HPSC.ie with a breakdown by each named hospital.

Ajay Oza, HPSC



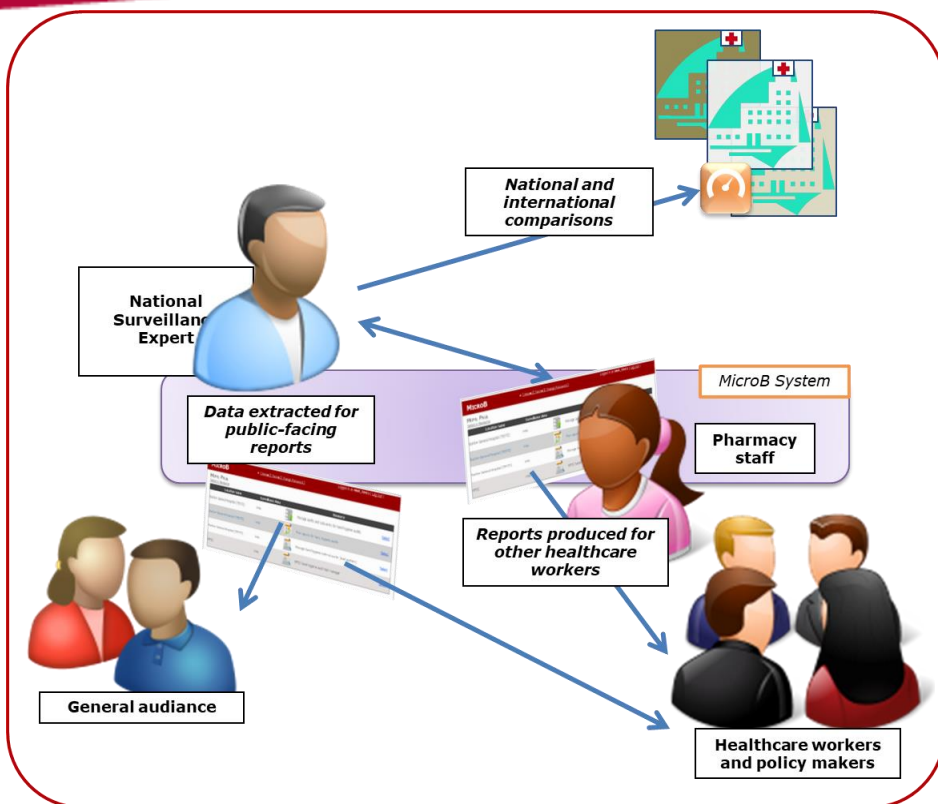


Figure 1. Pathways of hospital antimicrobial consumption data

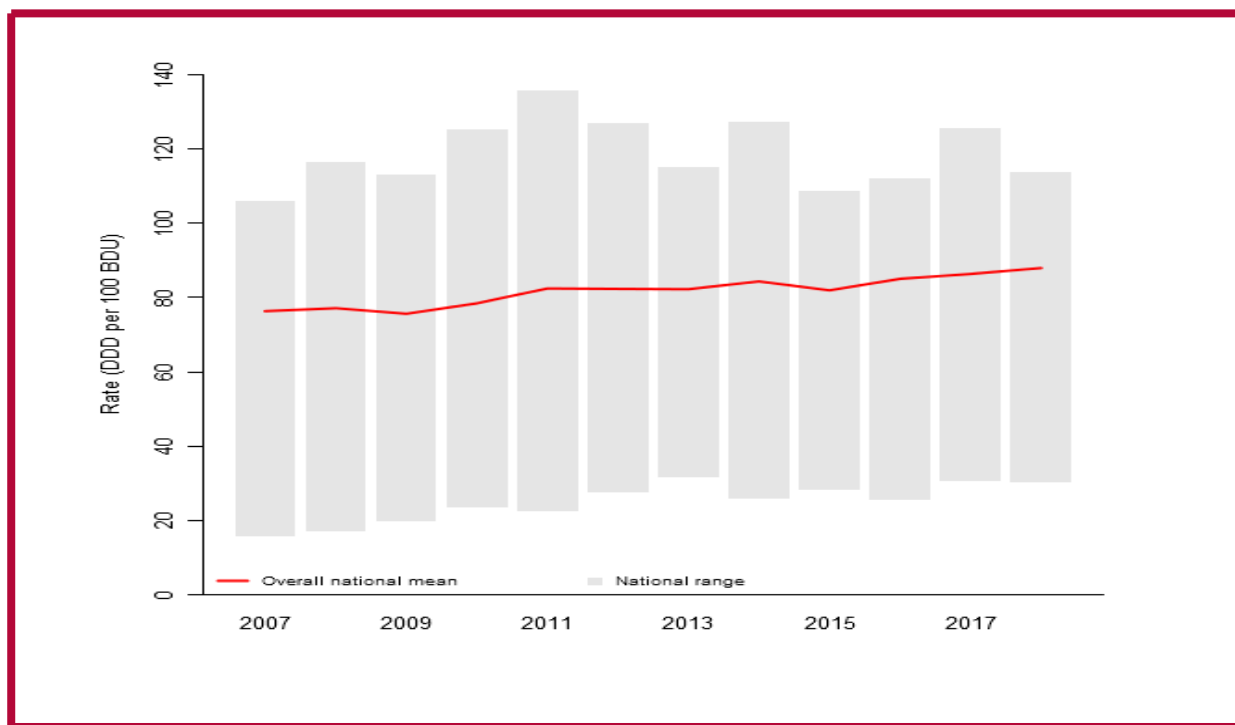


Figure 2. Annual rate of hospital consumption of systemic antibacterial drugs in DDD per 100 BDU. The grey bar shows the range use (lowest to highest) and the red line shows the median (average)

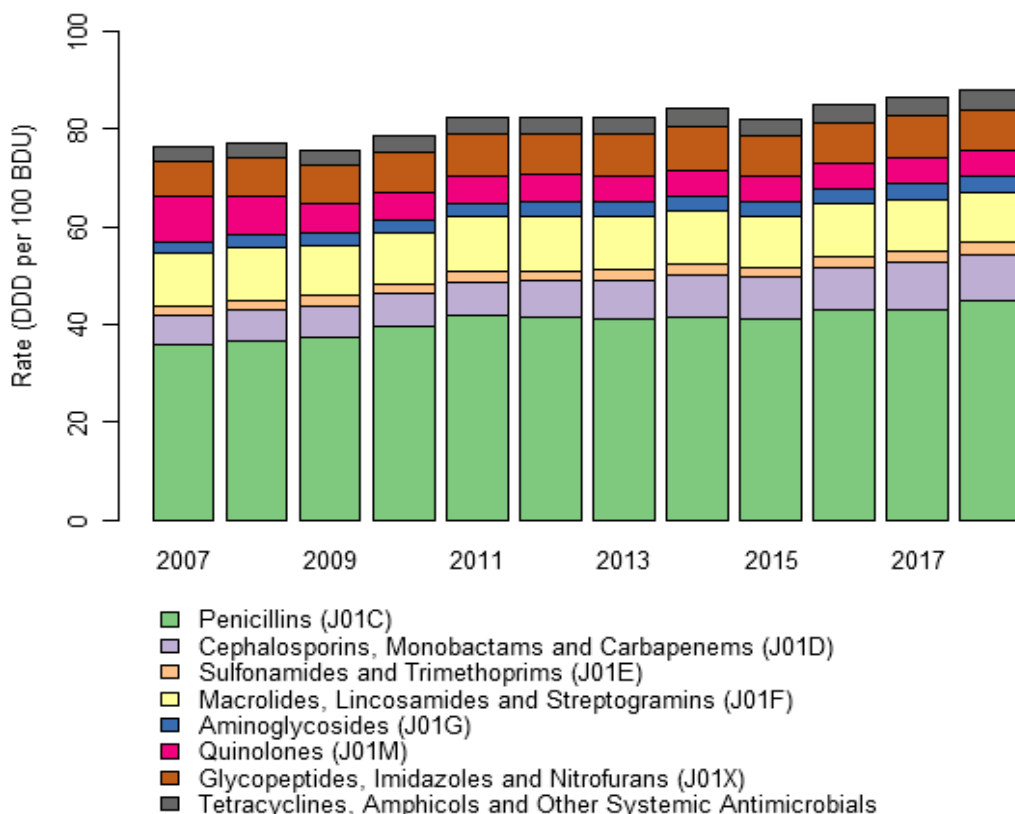


Fig. 3 Annual national hospital antibacterial consumption rate in DDD per 100 BDU by pharmacological subgroup (ATC level 3). The colours in the bar show the proportion of total use that is accounted for by the subgroup.

A C Change - new name for an old bug: *Clostridium difficile* becomes *Clostridioides difficile*

Microbiologists have very strict rules about the names for bacteria. Each bacteria has two names. This is a bit like a first name and family name. With bacteria the family names comes first.

With the bacteria you know as *Clostridium difficile* the family (genus) is *Clostridium* and the first name (species name) is *difficile*.

The science that goes into grouping bacteria into families (genera) has changed a lot in recent years. Looked at with new methods it sometimes happens that bacteria that we used to think were very similar and belonged in the same family, turn out to be quite different. When this happens the names may change. This can be a bit confusing, especially if you are not a microbiologist.

Recent research shows that the bug we have called *Clostridium difficile* is in fact not that similar to other bacteria in the genus *Clostridium*.



As a result it has now been renamed and will be called *Clostridioides*. If you get a laboratory report that says *Clostridioides difficile* detected, for clinical purposes this means exactly the same thing as the old report that said *Clostridium difficile* detected.

The good news is that we can still call it *C. difficile* or *C. diff* which are short names that most people use regularly.

If you would like to read more detailed information on this change please check out the latest edition of [Epi-Insight](#)

Tara Mitchell & Karen Burns, HPSC

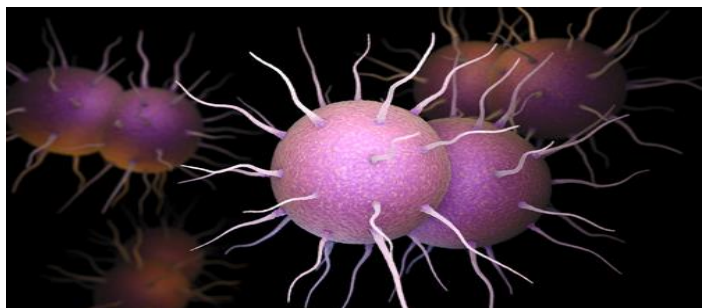
Gonorrhoea antimicrobial resistance: A World Health Organization priority

Gonorrhoea is an infection that is almost always spread from person to person by sexual activity. The bacteria that causes gonorrhoea is called *Neisseria gonorrhoeae* (*N. gonorrhoeae* for short). *N. gonorrhoeae* can cause genital, rectal and throat infections. It can sometimes also spread into the pelvis, blood stream and the joints. People are at less risk of getting gonorrhoea if they use barrier contraceptives such as condoms for all sexual contact, have fewer sexual partners and if both partners have a sexual health screen before sex with a new partner.

Symptoms of gonorrhoea include pain and discharge of pus from the genital area. A person may be infected with *N. gonorrhoeae* and spread it to other people without having any symptoms themselves. Rectal and throat infections often go unnoticed. Approximately half of all women with genital infection may have no symptoms and up to 1 in 10 men with genital infection may have no symptoms. In particular, without treatment some women will later develop serious inflammation of the pelvis, increasing the risk of infertility and ectopic pregnancy. Treating gonorrhoea is becoming more difficult because the bacteria that cause the infection are increasingly resistant to antibiotics.

Gonorrhoea is common in Ireland. It is a notifiable disease which means that cases of infection are reported to the Department of Public Health. There were about 50 cases of gonorrhoea per 100,000 population in 2018. Young people (aged 15-24 years) and men who have sex with men (MSM) are the groups most frequently affected in Ireland (HPSC, provisional data).

The emergence and spread of antimicrobial resistant *N. gonorrhoeae* is a major threat to the treatment of gonorrhoea infection. In the past *N. gonorrhoeae* has developed resistance to all classes of antibiotic used for the treatment of gonorrhoea infection. Resistance typically develops shortly after the introduction of a new class of antibiotics. The third generation cephalosporin ceftriaxone is now the cornerstone of treatment for gonorrhoea. However multi-drug resistant (MDR) and extensively drug resistant (XDR) strains with resistance to ceftriaxone have been reported in Ireland and internationally. [Reports](#) in [Epi-Insight](#) during 2018 (links) highlight this issue.



The World Health Organization (WHO) has listed gonorrhoea resistance to third generation cephalosporins as one of 9 priority bacteria-antibacterial drug combinations of international concern for the development of antimicrobial resistance. WHO has warned that gonorrhoea may become untreatable in the future unless new antimicrobial drugs become available.

In Ireland, National Guidelines for the prevention and treatment of gonorrhoea and for minimising the impact of antimicrobial resistant *Neisseria gonorrhoeae* were published in 2017. They were published by the Antimicrobial Resistance in *Neisseria gonorrhoeae* sub-committee of the HPSC Scientific Advisory Committee. They are available on the HPSC website [here](#).

Following the recommendations of the guidelines, a National Multidisciplinary Forum was established in 2018. The forum monitors gonorrhoea antimicrobial resistance in Ireland and advises on prevention, treatment and control of gonorrhoea in accordance with national and international evidence. The work of the National Forum forms part of the wider response in Ireland to antimicrobial resistance.

In December 2018 the clinical sub-group of the National Forum recommended a change to the national guidelines for the treatment of gonorrhoea. The new recommendation is to treat gonorrhoea with a single antibiotic, that is ceftriaxone 1g IM, as described in a recent [Epi-Insight report](#).

Cont'd overleaf



Gonorrhoea antimicrobial resistance: A World Health Organization priority (continued from previous page)

In 2017, the Interim National Gonococcal Reference Laboratory (GCRL) was established within the Department of Clinical Microbiology in St. James's Hospital. The Reference Laboratory provides a national picture of the types of *N. gonorrhoeae* circulating in Ireland and their level of antibiotic resistance. It collaborates closely with the WHO Collaborating Centre for Gonorrhoea and other STIs in Örebro University in Sweden. The GCRL also provides advice about gonorrhoea to clinicians and laboratories. HPSC and GCRL contribute information to a European programme monitoring *N. gonorrhoeae* antibiotic susceptibility at European level.

These recent developments represent progress in Ireland towards better monitoring of gonorrhoea antibiotic resistance but there is still work to do. The collaborative work of the National Forum on antimicrobial resistance in *N. gonorrhoeae* provides a forum for people with different expertise to work together to make further progress in minimising the impact of antibiotic resistant gonorrhoea.

The national guidelines for the prevention and control of gonorrhoea and for minimising the impact of antimicrobial resistance in *Neisseria gonorrhoeae* are [here](#). Further information is available on [gonorrhoea antimicrobial resistance](#) in Ireland. Information on the GCRL and isolate referral forms may be found on the [GCRL website](#). Information on treatment and management of gonorrhoea infections is available from the HSE [antibiotics prescribing](#) webpage. Information on sexual health and wellbeing is available [here](#).

Box 1. Key points for the clinical management of gonorrhoea

- ❖ It is recommended that samples for nucleic acid amplification testing (NAAT), culture and antimicrobial susceptibility testing should be taken from all patients presenting with signs/symptoms of gonorrhoea infection before treating empirically
- ❖ Where feasible, samples from NAAT positive cases should be taken for culture and antimicrobial susceptibility testing prior to treatment
- ❖ Patients with uncomplicated infection should be treated with a single dose of ceftriaxone (1g) given by intramuscular injection unless there is some specific reason to avoid the use of ceftriaxone
- ❖ Test of Cure is recommended for all patients following treatment to determine if the patient has cleared the infection
- ❖ Partner notification, to advise partners that they are at risk of infection and should be tested, should be undertaken in all cases

Written by: Dr Aoife Colgan and Dr Derval Igoe (HPSC), Dr Sarah Doyle (Department of Public Health, HSE Southeast and chair of National Forum on AMR in *N. gonorrhoeae*), Dr Brendan Crowley, (Medical Director, Interim Gonococcal Reference Laboratory, St. James's Hospital) **On behalf of the National Multidisciplinary Forum on Antimicrobial Resistance in *Neisseria gonorrhoeae***

Protocol/Guidance issued

Notification of Infectious Disease Outbreaks to Departments of Public Health in [acute hospital setting](#) - Declaration of an Outbreak and Closure of an Outbreak

Notification of Infectious Disease Outbreaks to Departments of Public Health in [community](#) settings - Declaration of an Outbreak and Closure of an Outbreak

Guidance Relating to [Healthcare Workers](#) (Acute Hospital and Community) Identified as Colonised with Antimicrobial Resistant Organisms including Carbapenemase Producing Enterobacterales (CPE) or Identified as CPE Contacts

[Requirements for Screening](#) for Carbapenemase Producing Enterobacterales (CPE) updated from previous guidance issued in 2018.

[Treatment of Suspected or Confirmed Infection](#) with Enterobacterales or Acinetobacter spp. Resistant to Carbapenems and Surgical Prophylaxis in the Context of Colonisation with such organisms

Guideline - [Infection Control Guiding](#) Principles for Buildings Acute Hospitals and Community Healthcare Settings



HCAI/MDRO Medical Scientist Network

Save the Date! November 13th 2019

Our second network event took place on June 4th with speakers covering all things CPE including: National CPE laboratory whole genome sequencing data, interesting case studies of invasive CPE infections, diagnostic techniques to detect CPE & CPE in the environment.

Our next network event will provide updates on CPE but will focus on *C.difficile*, if you have any interesting presentations on this, please contact Maria Molloy, Surveillance Scientist by email (Mariam.molloy@hse.ie)



Picture Perfect

It's important that the images we select to illustrate social media posts, published reports and PR opportunities accurately reflect good infection prevention control practice. It is important that images promote 'bare below the elbow' as the norm within our services.

Images that do not support our infection prevention control policies can cause difficulty at a local level for infection prevention control staff. Images should be credible and promote good practice.

The HPSC AMRIC communications lead has developed [guidance](#) on selecting appropriate images that reflect good infection prevention control practice.

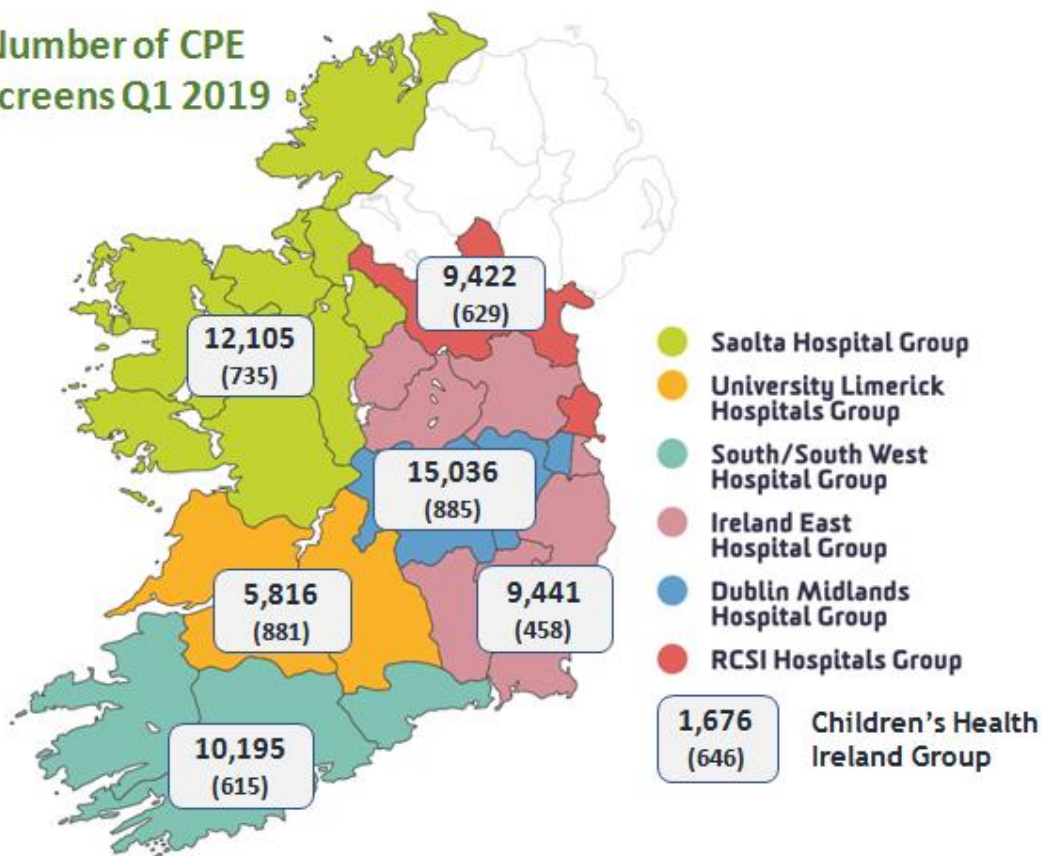
Many of the royalty-free image banks are based on American health services. It can be difficult to get images of clinicians without white coats but please do not use them for illustrating HSE services.

This image shows a doctor wearing a white coat to the elbow, a wristwatch and tie, contrary to IPCN good practice. Check out the guidelines for more information or contact audrey.lambourn@hse.ie



CPE screening statistics

Number of CPE screens Q1 2019



Websites we like

mychild.ie

www.understandtogether.ie

www.ecdc.europa.eu

www.antibioticprescribing.ie

