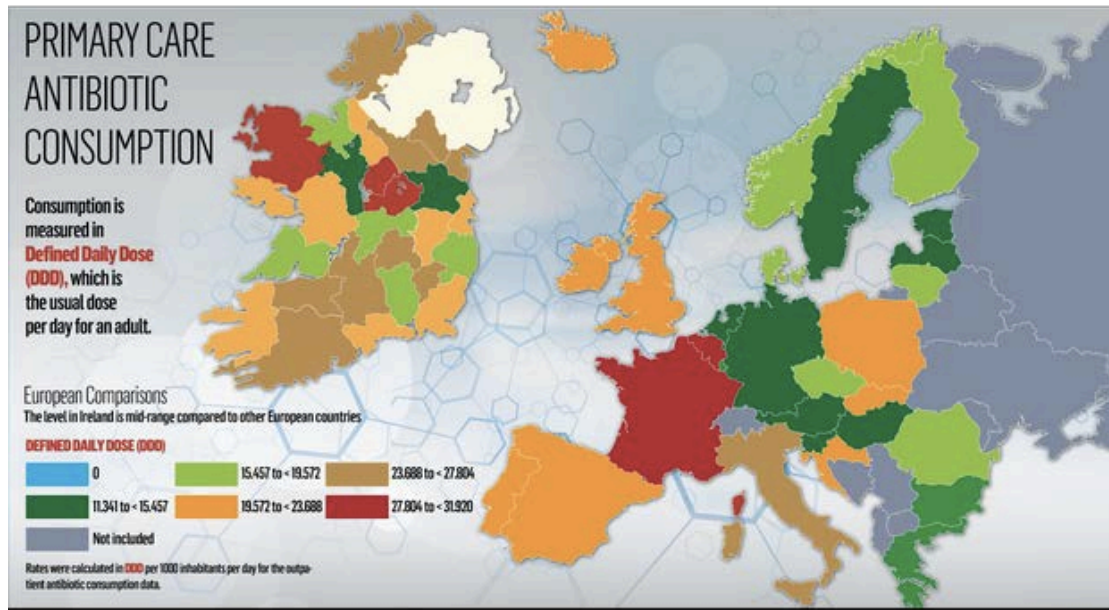


## HCAI AMR Newsletter March 2015

### Antibiotic Use by County and Country

#### (i) Antibiotic Use by County

[A recent article on independent.ie](#) on the best and worst counties for antibiotic consumption sparked a lot of media controversy.



Well done to Meath and Roscommon on being the counties with the lowest antibiotic consumption rate, but Mayo, Longford and Westmeath... What is going on?

In addition, there are marked differences at county level with regard to the type of antibiotic being used. [See this 2013 short visual report.](#)

## Antibiotic Groups – Counties, 2012

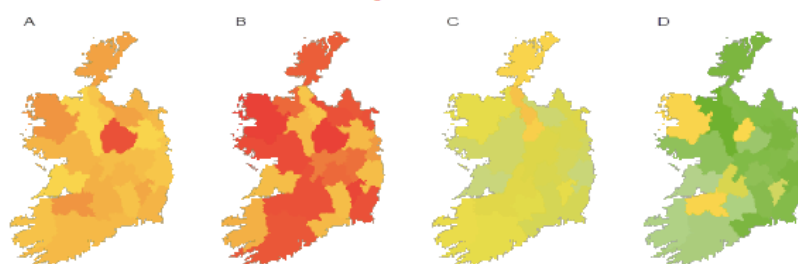


Fig 11:

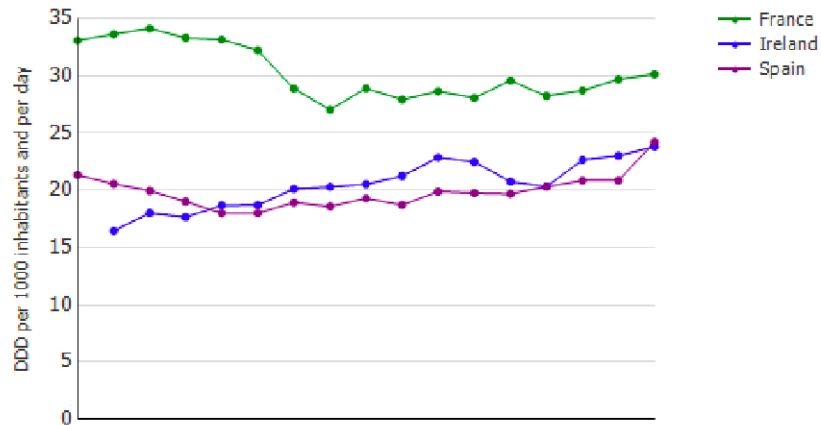
- A. Penicillins** Consumption of penicillins (J01C) expressed in DDD per 1000 inhabitants and per day. E.g. Amoxicillin or Co-amoxiclav
- B. Macrolides** Consumption of macrolides, lincosamides and streptogramins (J01F) expressed in DDD per 1000 inhabitants and per day. E.g. Clarithromycin
- C. Cephalosporins** Consumption of cephalosporins (J01D) expressed in DDD per 1000 inhabitants and per day. E.g. Cefaclor
- D. Quinolones** Consumption of quinolones (J01M) expressed in DDD per 1000 inhabitants and per day. E.g. Ciprofloxacin

*For figures 11 and 12, the same type of scheme as the one in fig 1 is used for eight ECDC (ESAC-Net) quality indicators to show variation in Irish counties scaled against ECDC 2010 data. The scale has been graduated to show greater contrast between counties.*

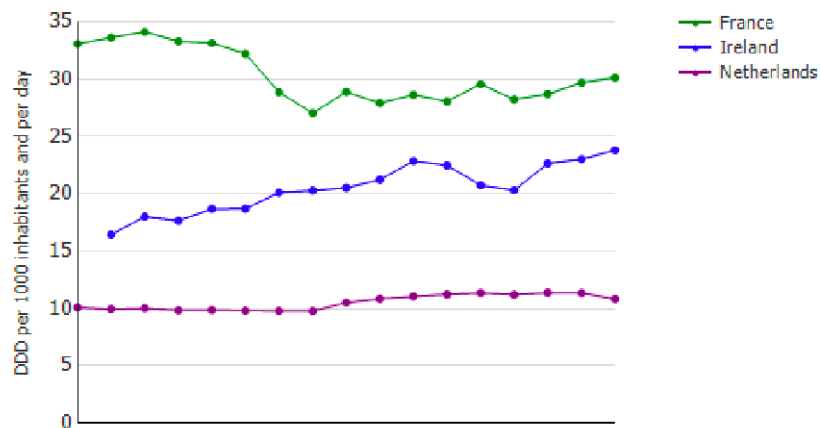
### (i) Antibiotic Use by European Country

This type of variation between antibiotic consumption rates also occurs between European countries. There is no evidence that most European countries have major differences in population health requiring more antibiotic use. Also, there is no evidence that some populations are more “allergic” than others yet there is marked variation in macrolide use among counties and countries. [Click here for slides on antibiotic consumption trends over the last 10 years.](#)

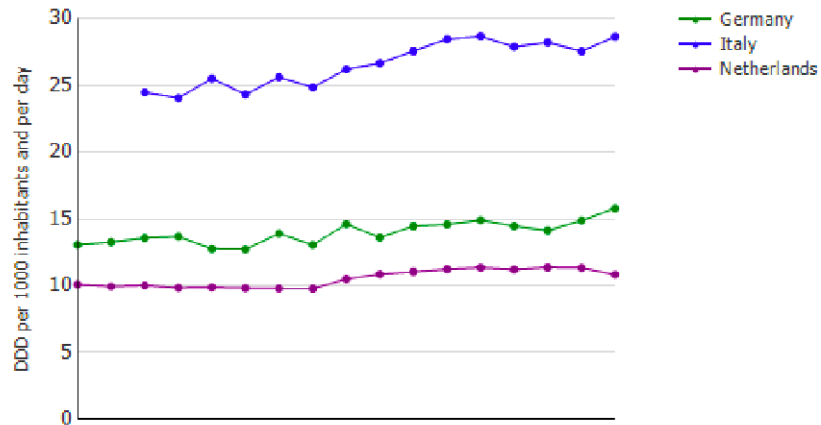
## France v Ireland v Spain



## France v Ireland v Netherlands

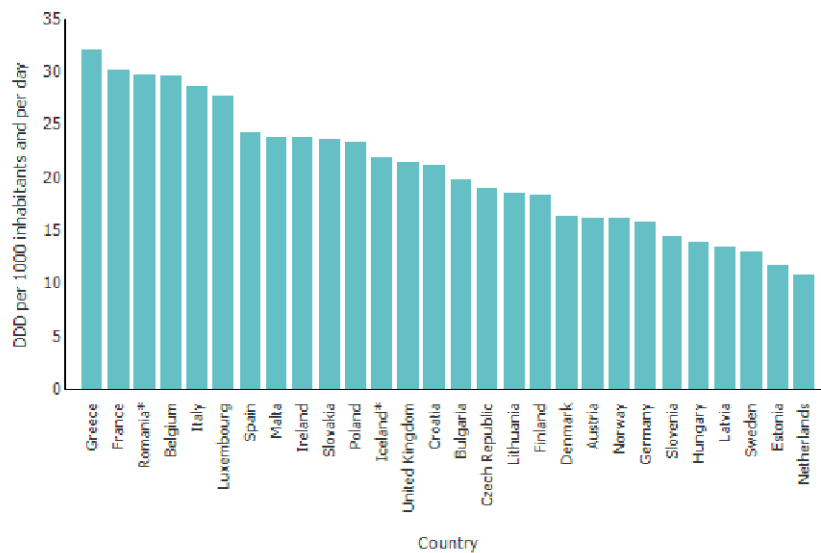


# Italy v Germany v Netherlands



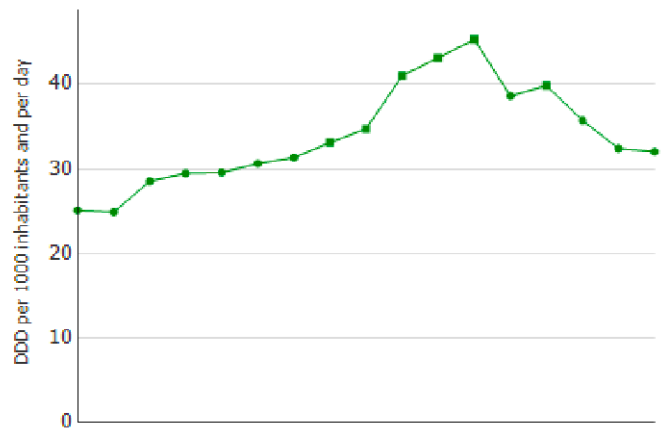
Latest overall antibiotic consumption data comparisons available from reporting countries:

Consumption of antimicrobials of Antibacterials For Systemic Use (ATC group J01) in the community (primary care sector) in Europe, reporting year 2013



While Greece remains the worst on this league table, there has been an interesting consequence from their economic crisis.

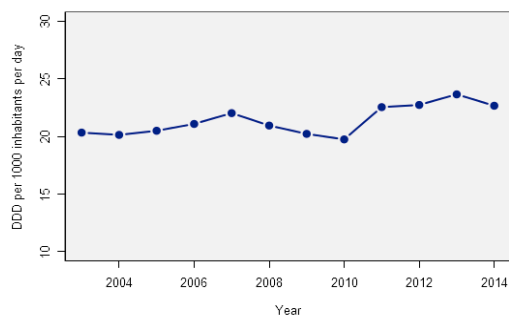
# GREECE – we can reduce Antibiotic Consumption



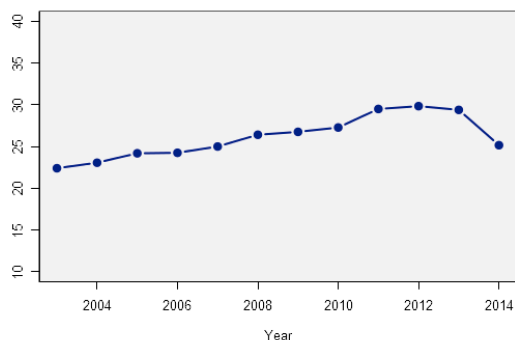
I'm glad to report that although the downward shift is not dramatic, there is evidence of a small reduction in Ireland's overall community antibiotic consumption rate in 2014, and importantly, the quality of our prescribing seems to be improving with a reduction in the use of some broad-spectrum antibiotics (HPSC preliminary data).

## Ireland – We can improve the quality of antibiotic prescribing

Community antibiotic consumption - first half 2014



Use of co amoxiclav



So what can we do as individual GPs?

## Narrow versus broad-spectrum

**Penicillin V for strep throat**

**Co amoxiclav for strep throat**



**GP's need to think more scientifically – what are you treating ?**



### **If you decide to prescribe ask the following questions ?**

What do I tend to prescribe for a particular condition?

Is it the right drug for this condition ?

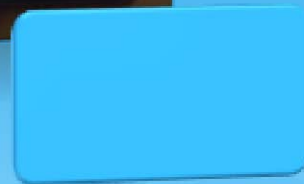
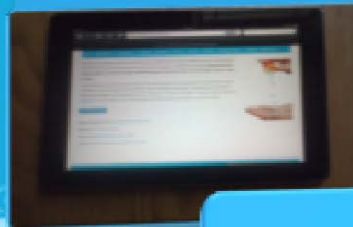
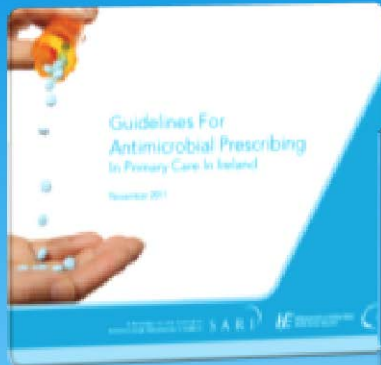
Is it the right dose for the patient sitting in front of me ?

How long do I tend to prescribe it for?

What investigations, if any, do I use to support my decisions?

Do I know about the Irish primary care prescribing guidelines and am I using them?

Every time we consider  
prescribing GP's need  
to ask themselves .....







Have I consulted the antibiotic  
guidelines recently?

[www.antibioticprescribing.ie](http://www.antibioticprescribing.ie)

We are always adding new things to help you. There is a great new section on prescribing where renal function is impaired.

We have worked with Prof Michael Barry and Dr Susan Clarke from the Medicines Management Programme to produce a preferred antibiotic list.

 <b>Preferred Antibiotics in Primary Care</b>  		
<p><b>In many cases in Primary Care the Preferred Antibiotic is <i>No antibiotic</i></b></p> <p>See <a href="http://www.undertheweather.ie">www.undertheweather.ie</a> for full details but below are the preferred first line treatment choices when antibiotics are indicated and which antibiotics we would prefer to minimise the use of to reduce the emergence of resistance.</p>		
Respiratory Infections (upper and lower)	Urinary Tract Infections	Soft tissue infections – cellulitis, acne
Penicillin V (phenoxymethylpenicillin) Calvepen®	Trimethoprim	Flucloxacillin
Amoxicillin	Nitrofurantoin	Doxycycline
Doxycycline	Fosfomycin	Lymecycline (Tetralysal®)
Amoxicillin and clarithromycin if Community Acquired Pneumonia (CAP)	Cephalexin	Trimethoprim
Clarithromycin if <u>true</u> penicillin allergy or specific clinical indication		
 <b>Antibiotics to be avoided in Primary Care</b>		
Co- amoxiclav (unless animal or human bite or second line for some infections)	Azithromycin – only on advice of consultant or if treating STI	
Ciprofloxacin (only in proven resistant UTI or acute prostatitis)	Moxifloxacin – only on consultant advice	
Most third generation cephalosporins	Macrolides (unless penicillin allergic or specific indication e.g. mycoplasma, helicobacter eradication)	
Clindamycin		
<small>February 2015 Medicines Management and HCAI/AMR Programmes</small>		

### Useful Information

- [www.undertheweather.ie](http://www.undertheweather.ie) - Self-help for patients
- [www.hse.ie/go/antibiotics](http://www.hse.ie/go/antibiotics) - Public information campaign on antibiotics, including campaign materials
- [www.e-bug.eu](http://www.e-bug.eu) - European wide antibiotic and hygiene teaching resource for junior and senior school children. Translated into Irish and available via the Department of Education free to all Irish school children.

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