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Groupement Pharmaceutique de l'Union Européenne*

# Contribution by community pharmacies to rational use of antibiotics

*Jūratė Švarcaitė Mpharm MSc, Secretary General*

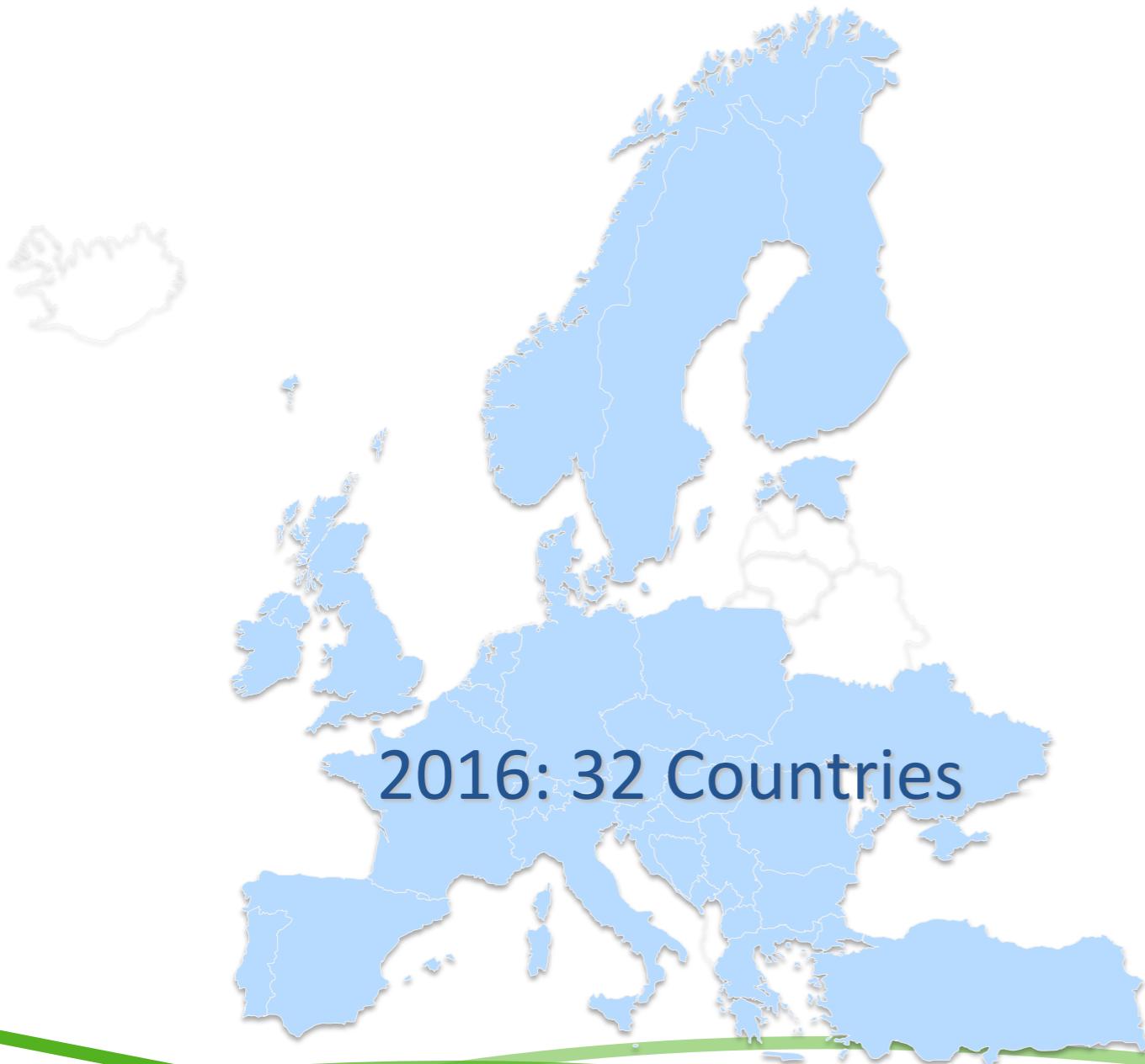


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1959

2015

- 400.000 Community Pharmacists in Europe,
- 160.000 Community Pharmacies in Europe,
- **46 million citizens visit a pharmacy every day.**



# Pharmacists role in the control and prevention of antimicrobial resistance

- Ensure that the patient understands the dosage and duration of treatment to improve adherence and increase treatment success; promote appropriate disposal of leftover antimicrobials.
- Ensure that the patient understands how to benefit most from their treatment, recognise side effects and know what action to take and know what action to take when a suspected ADR occurs.
- Participate in local, regional or national public health campaigns concerning the prudent use of antimicrobials.
- Participate actively involved in antimicrobial management in the multidisciplinary care team.



# Overview

- Participation in general public health campaigns
- Participation in public health campaigns targeting citizens experiencing ‘bacterial infection like symptoms’
- Intervention during dispensing process
- Multidisciplinary interventions



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# GENERAL PUBLIC HEALTH CAMPAIGNS



# Portugal: Online and social media campaign



# Germany: Leaflets



## Hygiene schützt vor vielen Infektionen

Einige Beispiele, wie Sie Infektionen, speziell der Atemwege, vermeiden können:

- » Lassen Sie sich gegen Infektionskrankheiten impfen. Die Schutzimpfung gegen Grippe (saisonale Influenza) sollte jährlich wiederholt werden.
- » Waschen Sie sich mehrmals täglich die Hände mit Wasser und Seife für etwa 30 Sekunden, auch zwischen den Fingern.
- » Händewaschen ist Pflicht nach jedem Toilettenbesuch, vor jeder Mahlzeit sowie nach dem Kontakt mit Tieren und rohem Fleisch.
- » Putzen Sie sich die Nase mit Einmaltaschentüchern und entsorgen Sie diese anschließend umgehend. Waschen Sie sich nach dem Nasenputzen die Hände.
- » Husten oder niesen Sie nicht in die Hand, sondern in die Armebeuge. Halten Sie dabei möglichst großen Abstand zu anderen Menschen.
- » Berühren Sie Ihr Gesicht möglichst wenig mit den Händen.
- » Lüften Sie mehrmals täglich. Am besten das Fenster für einige Minuten komplett öffnen. Das sorgt für ein besseres Raumklima.



Eine europäische Initiative  
für die Gesundheit



ABDA – Bundesvereinigung  
Deutscher Apothekerverbände  
Kommunikation und Öffentlichkeitsarbeit  
Jägerstraße 49/50  
10117 Berlin  
[www.abda.de](http://www.abda.de)



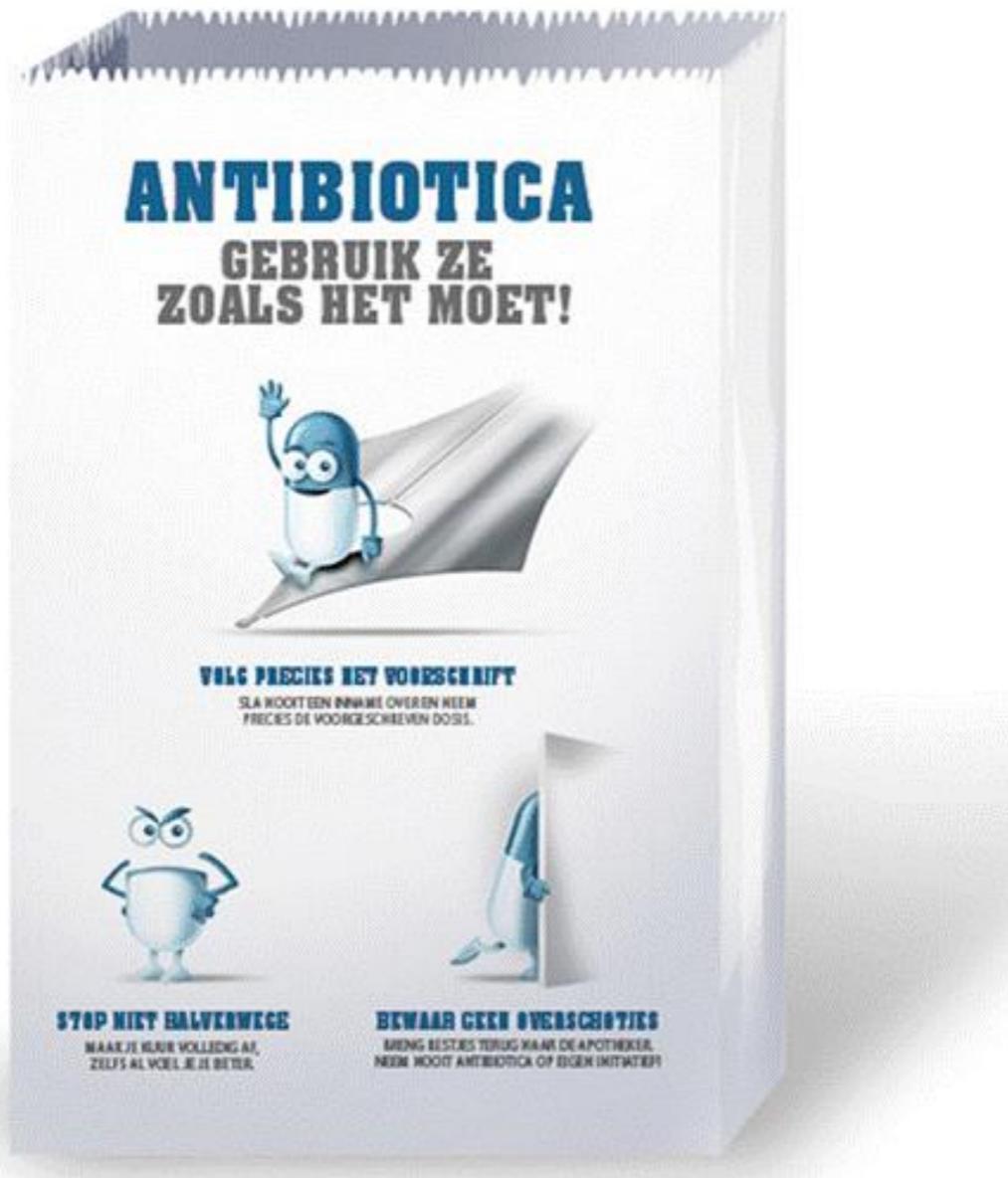
Bundesvereinigung  
Deutscher Apothekerverbände



IHRE APOTHEKE INFORMIERT ZUM EUROPÄISCHEN  
ANTIBIOTIKATAG

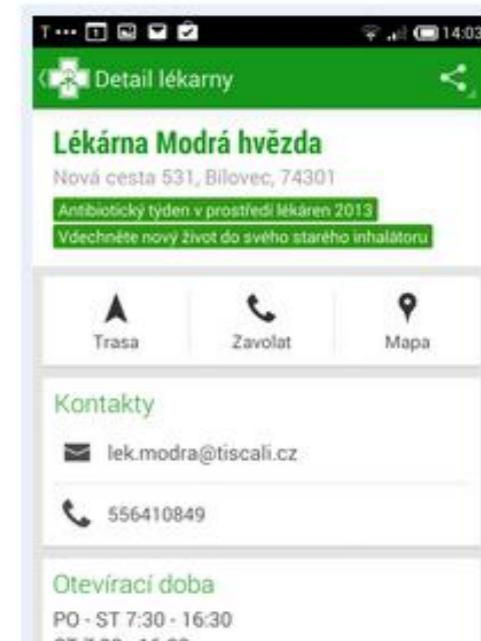
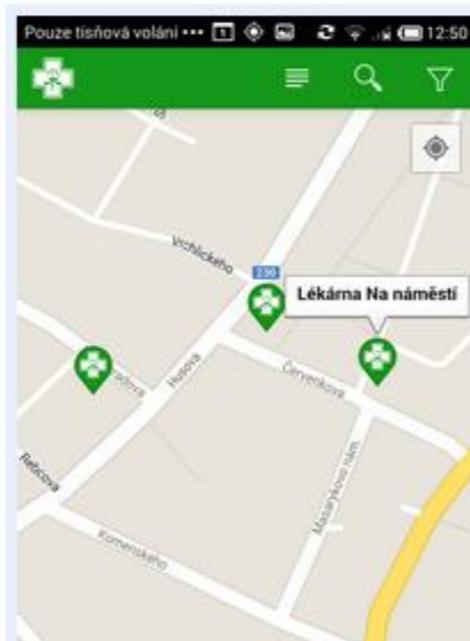
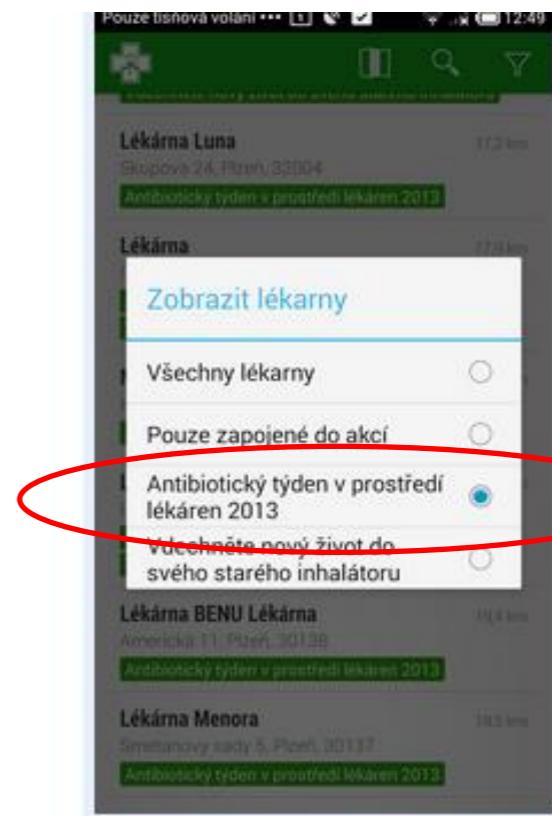
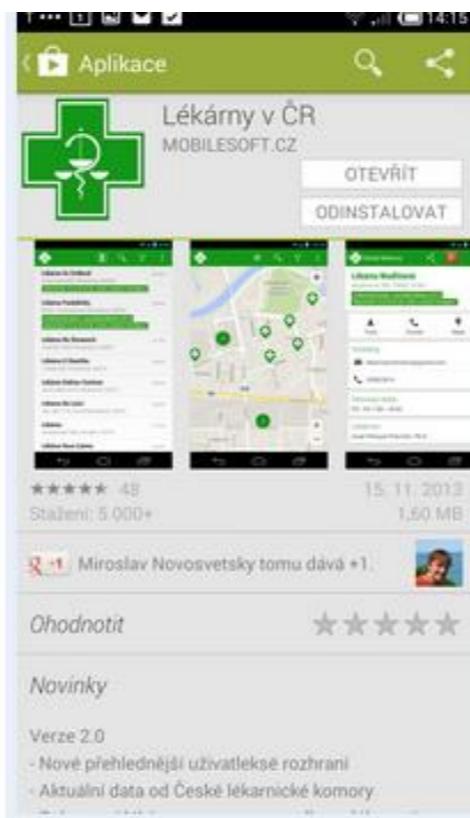
**7 Tipps für den richtigen  
Umgang mit Antibiotika**

# Belgium: Paper bags



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# Czech Republic: APP



<http://www.lekarnici.cz/Pro-verejnost/Informace-pro-verejnost/Lekarny-v-mobilu.aspx>



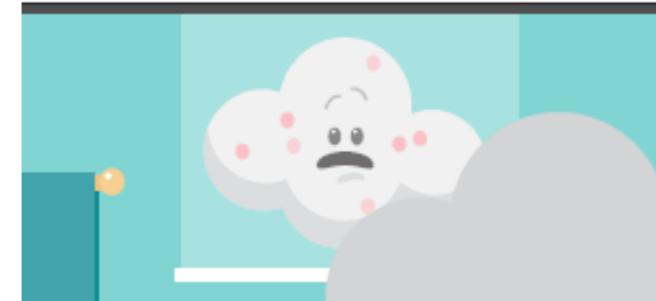
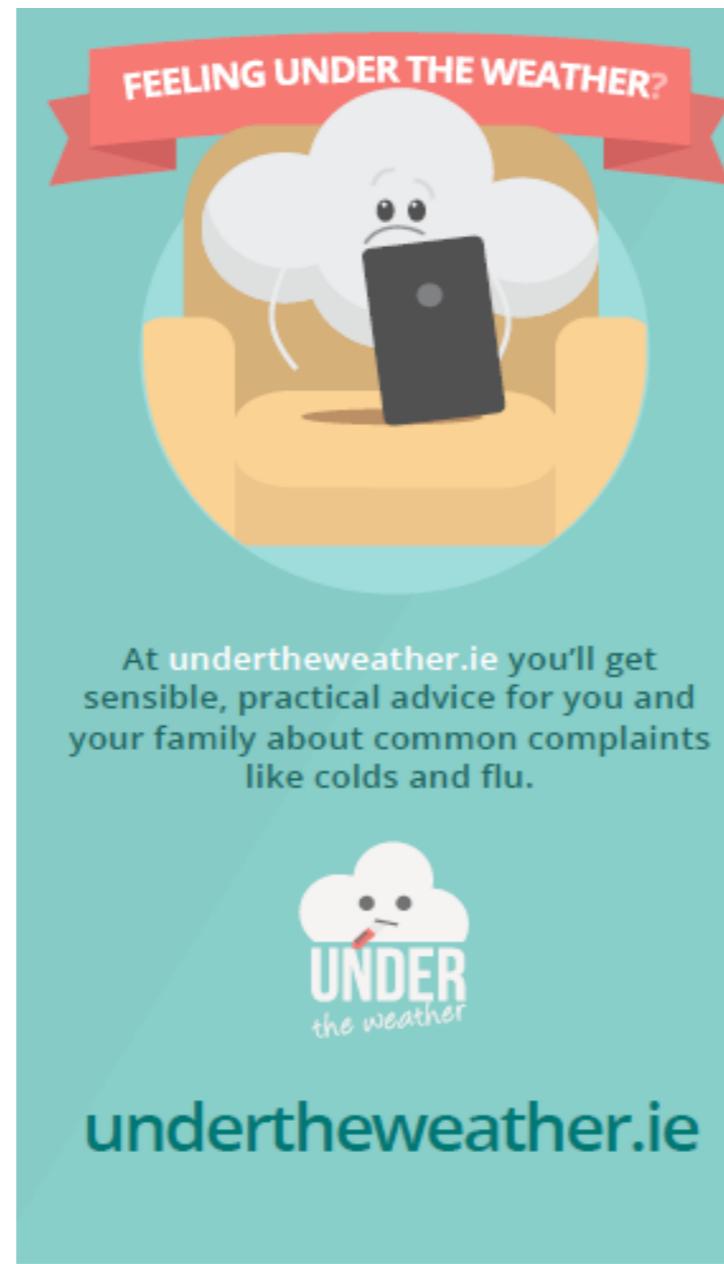
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# **PUBLIC HEALTH CAMPAIGNS TARGETING CITIZENS EXPERIENCING 'BACTERIAL INFECTION LIKE SYMPTOMS'**



# Ireland: Online interactive website



At [undertheweather.ie](http://undertheweather.ie) you'll get sensible practical advice for you and your family about common complaints like:

- |              |   |
|--------------|---|
| Colds        | High Temperature                          |
| Flu          | Ear Aches                                 |
| Sore Throats | Tummy Aches,<br>Vomiting and<br>Diarrhoea |
| Rashes       |   |

Find out what is making you ill, when you are likely to get better, how to take care of yourself and if and when you might need medical help.

## GET ADVICE & GET BETTER

[Undertheweather.ie](http://undertheweather.ie) - your guide to treating common complaints with common sense.

[undertheweather.ie](http://undertheweather.ie)



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# UK: Online interactive tool

The screenshot shows the homepage of the 'treat yourself better' website. At the top, there is a navigation bar with links: Symptom checker, Warning signs, Expert advice, Men's advice, FAQs, Media centre, HCP hub, Useful links, References, Search, and a Cookie Policy link. Below the navigation bar, there is a large banner with a blurred background image of a person's face. On the left side of the banner, there is a green curved arrow pointing upwards and to the right. To the right of the arrow, there is a green speech bubble containing the text: "SNAP A SELFIE IN A PHARMACY AND WIN A SPA BREAK FOR TWO CLICK [HERE](#)". In the center of the banner, there is a large green speech bubble with a white cross icon containing the text: "treat yourself better with pharmacist advice". To the right of the banner, there is another green speech bubble containing the text: "3 out of 4 people don't know pharmacists train for 5 years". Above this speech bubble, there is a smaller text: "1 in 4 people unnecessarily visit their GP or A&E as a first port of call when suffering from flu". There are also social media sharing icons for Facebook and Twitter, and a "Tweet" button. At the bottom of the banner, there is a "Symptom checker" link with a downward arrow. The URL <http://www.treatyourselfbetter.co.uk/> is displayed at the bottom right of the page.



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# INTERVENTION DURING DISPENSING PROCESS

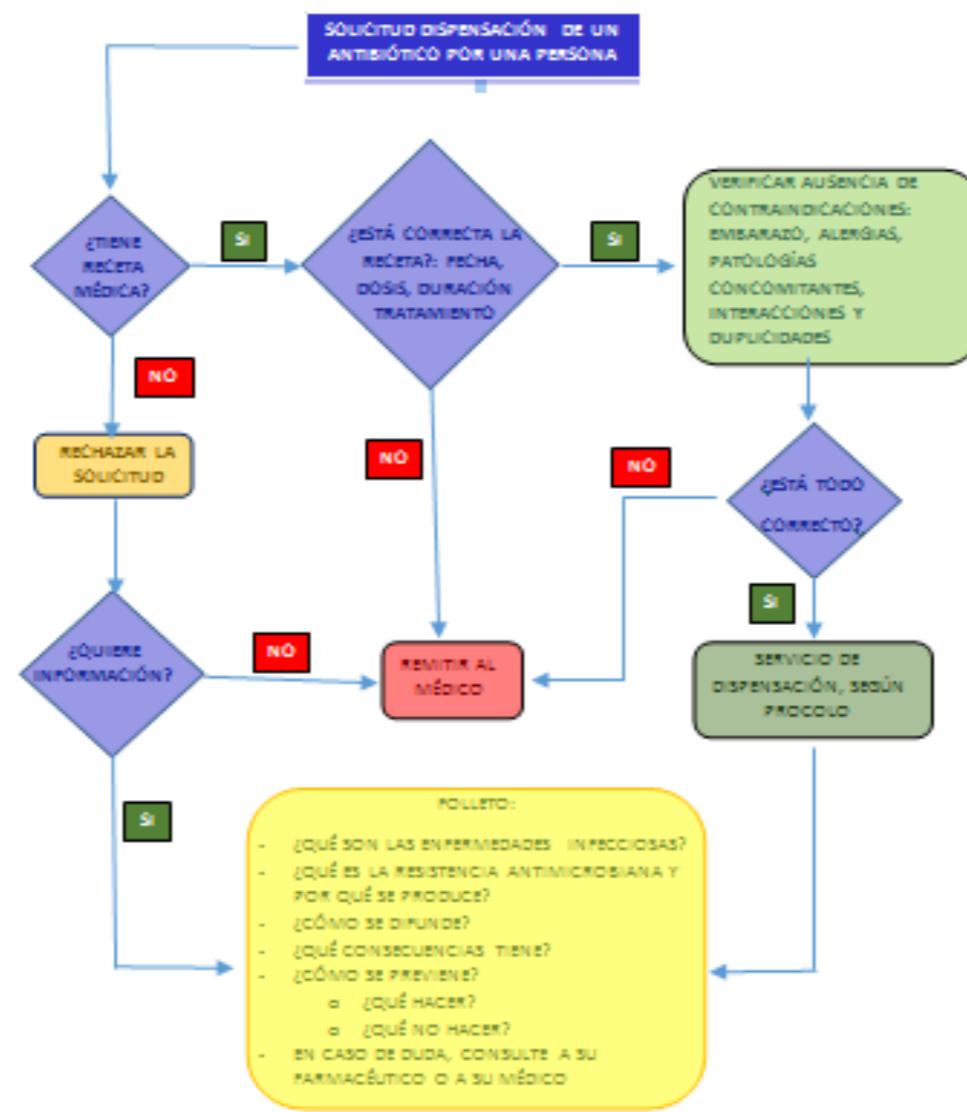


# Belgium: Stickers



# Spain: Dispensing protocols

## DIAGRAMA DE FLUJO DE LA DISPENSACIÓN DE ANTIBIÓTICOS EN FARMACIA COMUNITARIA





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# MULTIDISCIPLINARY INTERVENTIONS



# Portugal

## RESEARCH ARTICLE

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Future  
**MICROBIOLOGY**

## Decreasing antibiotic use through a joint intervention targeting physicians and pharmacists

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Maria Piñeiro-Lamas<sup>5</sup>, Adolfo Figueiras<sup>5,6</sup> & Maria Teresa Herdeiro<sup>1,7</sup>

**Aim:** To decrease population antibiotic use through an educational intervention targeting primary care physicians' and community pharmacists' attitudes and knowledge. **Methods:** We designed a pragmatic cluster-randomized trial covering all National Health System primary care physicians and all community pharmacists' in a region in the north of Portugal. The study protocol was registered on ClinicalTrials.gov (identifier: NCT02173509). **Results:** After adjustment for baseline values and comparison with the control group, the intervention was associated with a significant reduction in overall antibiotic use in the year following the intervention. The effect was most marked for tetracyclines, macrolides and cephalosporins. No statistically significant differences were observed for fluoroquinolone consumption. **Conclusion:** Multifaceted interventions involving physicians, pharmacists and general public proved effective in reducing antibiotic consumption in the population.

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Currently, antimicrobial resistance is a growing threat to public health worldwide, and the WHO has issued an alert of the possibility of returning to the preantibiotic era [1]. It is well known that the use of antibiotics is responsible for the emergence and spread of micro-organisms resistant to antibiotics [2,6]. Resistance is responsible for treatment failure and deaths [7–10], prolonged hospital stays and increased costs [10]. Portugal presents high rates of antibiotics consumption (2.3 packages per 1000 inhabitants per day) [11], and is one of the countries with highest bacterial resistances rates [12].

In contrast to northern Europe and North America, where outpatient antimicrobials are largely restricted to prescription-only use, nonprescription access to antimicrobials is common in the rest of the world [13], including Portugal [14]. Nevertheless, studies on interventions to improve antibiotic use focus mainly on physicians [15–17], even though pharmacists play a key role in the responsible

### KEYWORDS

- antibiotic consumption
- antibiotic policies
- community pharmacists
- educational interventions
- microbial resistance
- primary care physicians



# THANK YOU

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