

European survey on public health policies for managing cases of meningococcal disease and their contacts, 2013

What has changed since 2007?

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Background

Invasive meningococcal disease (IMD) is associated with a high level of anxiety and increased risk of disease in close contacts.

Uniform policies for managing cases and contacts across Europe are desirable to facilitate evidence based approach and communication in case of cross border case management.

2007 European survey: important differences in country policies.

2010 Publication of evidence-based guidance by ECDC:

- recommendation of rifampicin, ciprofloxacin, ceftriaxone, azithromycin and cefixime for chemoprophylaxis;
- attending the same day care as a case is an indication for chemoprophylaxis, attending the same school/college is not in itself an indication.

OBJECTIVES OF THIS STUDY

- Describe public health management policies across Europe in 2013.
- Assess changes since 2007 in light of the 2010 ECDC guidance.

Methods

- Cross sectional survey
- 32 national IMD public health representatives from European countries
- Online (voozoo) or word questionnaire
- Using Excel and STATA 11 for data management and analysis
- Calculation of proportions
- Comparison of responses for 2007 and 2013: Chi², Fisher's exact test

Results

- All 32 (100%) countries responded:
 - two responses (regional level) for Belgium and Italy ⇔ n=34 countries/regions.
- 23/34 (69%) countries/regions were the same as for 2007 survey.
- We show here only some selected results concerning the management of contacts.
- **Choice of chemoprophylaxis 2013 versus 2007** (n=23) (figures 1, 2):
 - a higher proportion of countries is using the recommended antibiotics;
 - the use of ceftriaxone for children has increased significantly.
- **ECDC guidance document:**
 - found useful at national level by 28/31 (90%) countries/regions;
 - used for updating country guidelines by 17/34 (50%) countries/regions.
- **Prophylaxis generally recommended by 33/34 (97%) countries/regions.**
- **Chemoprophylaxis in day care and schools** (table):
 - 2013 survey: 28/34 (82%) countries/regions define "attending the same day care" as "close contact" per se, thus chemoprophylaxis is mostly administered to the entire day care or at least the whole group of children;
 - for older children prophylaxis is mostly limited to close contacts.

FIGURE 1 CHOICE OF CHEMOPROPHYLAXIS IN ADULTS

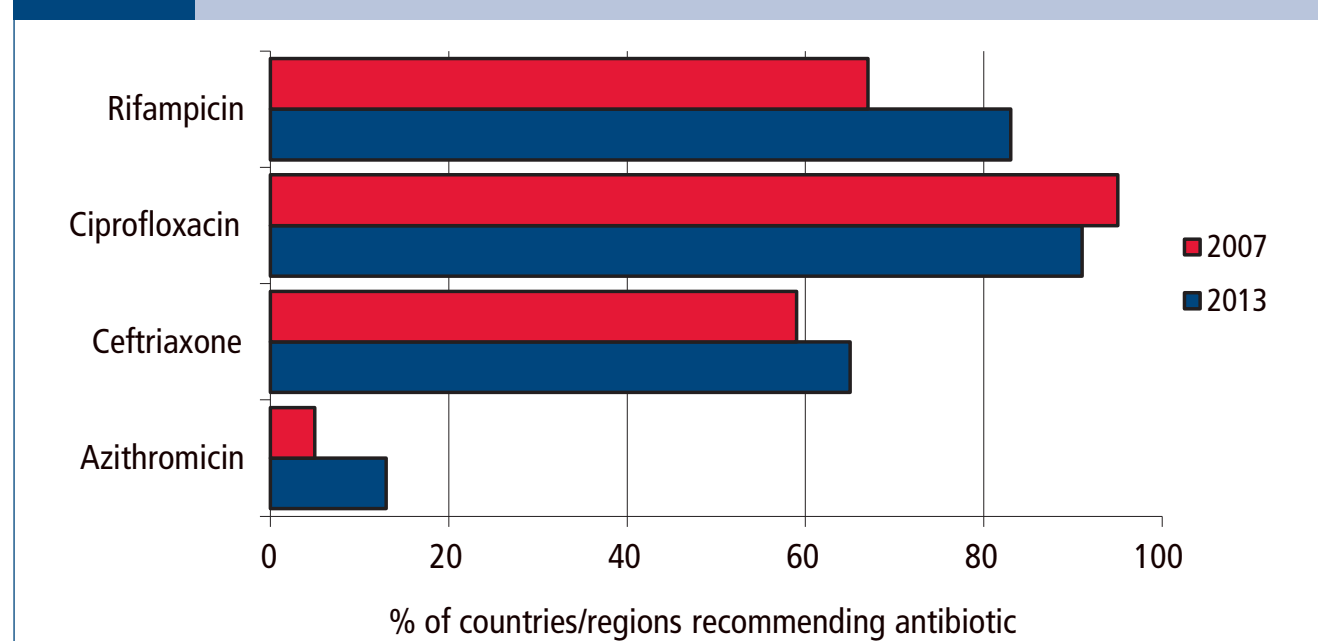


FIGURE 2 CHOICE OF CHEMOPROPHYLAXIS IN CHILDREN

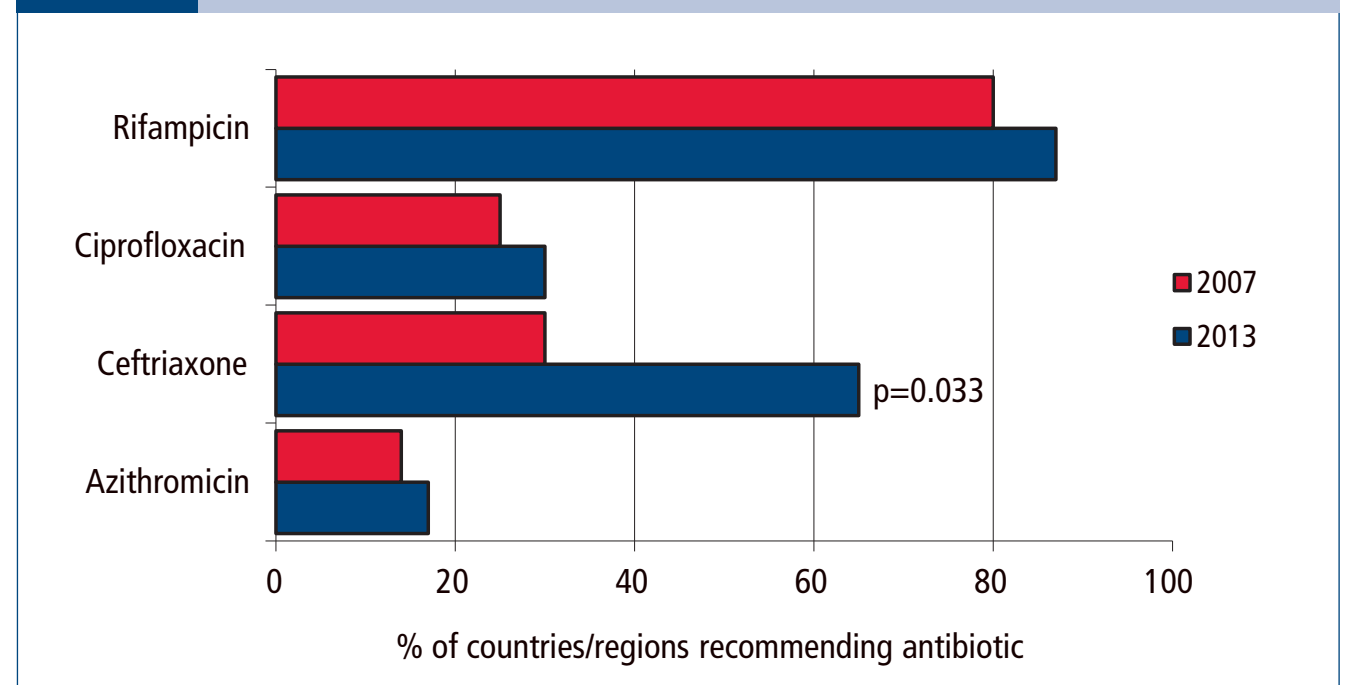


TABLE RECOMMENDATION OF CHEMOPROPHYLAXIS IN DAY CARE AND SCHOOLS

| | | 2007 (n=23) | 2013 (n=32)* | p-value# |
|----------|--|-------------|--------------|----------|
| Day care | For all children in entire day care | 3 (13%) | 6 (19%) | 1.00 |
| | For all children in the same group | 8 (35%) | 23 (72%) | 0.017 |
| | Only for children with close contact to the case | - | 2 (6%) | - |
| | Not recommended at all | 12 (52%) | 3 (9%) | 0.011 |
| Schools | For all children in the same school | - | 0 | - |
| | For all children in the same class | - | 6 (19%) | - |
| | Only for children with close contact to the case | - | 18 (56%) | - |
| | Not recommended at all | - | 7 (22%) | - |

* Thirty-three out of 34 countries administer chemoprophylaxis to close contacts in general, of which one does not have specific guidelines for different situations.
P-values refer to a comparison of the 23 countries which took part in both surveys.
- No data available for 2007.

Strengths & Limitations

- High response rate
- Comparison possible with earlier survey
- Small numbers make statistical testing less pertinent
- Legal status of recommendations variable
- No data on:
 - actual implementation of recommendations;
 - impact of recommendations on prevention of secondary cases;
 - influence of different epidemiological situations in countries;
 - variation in day care settings.

Conclusions

- Guidance found useful by European countries.
- Harmonization of public health management of IMD has progressed in Europe:
 - most countries use effective/recommended antibiotics;
 - increasing adherence to evidence based recommendations for chemoprophylaxis in day care and school settings;
 - some heterogeneity persists regarding definition of target groups for chemoprophylaxis, suggesting continued uncertainty.
- Further research on reasons for discrepancies and on "real-life" implementation of evidence-based guidance desirable.

ECDC guidance document: http://www.ecdc.europa.eu/en/publications/publications/1010_gui_meningococcal_guidance.pdf

