

# Antibiotic resistant (ABR) hotspots in the population of Rotterdam: a feasibility study for a future population-based prevalence study

Published: 13-07-2016

Last updated: 20-04-2024

The objective of the study is to determine the prevalence of antibiotic resistant E. coli, S. aureus and K. pneumoniae strains in residents of Rotterdam visiting general practitioners in neighborhoods with low socioeconomic status (...)

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Pending
<b>Health condition type</b>	Ancillary infectious topics
<b>Study type</b>	Observational non invasive

## Summary

### ID

NL-OMON43243

### Source

ToetsingOnline

### Brief title

ABR population Rotterdam

### Condition

- Ancillary infectious topics

### Synonym

antibiotic resistance - resistant bacteria

### Research involving

Human

### Sponsors and support

**Primary sponsor:** GGD Rotterdam-Rijnmond

**Source(s) of monetary or material Support:** eigen bijdrage GGD Rotterdam

## Intervention

**Keyword:** antibiotic resistance, population, Rotterdam

## Outcome measures

### Primary outcome

Prevalence (%) of antibiotic resistant *E. coli*, *S. aureus* and *K. pneumoniae* strains in a population sample of residents of Rotterdam.

### Secondary outcome

Associations between the presence of antibiotic resistance and riskfactors such as age, sex, travel history, antibiotic use, hospital admissions and workplace.

## Study description

### Background summary

Although the Netherlands is still considered a country with a low prevalence of multidrug-resistant bacteria, the risk of carbapenemase-producing Enterobacteriaceae and other resistant bacteria have already been reported . International travel and visiting international hospitals have been suggested as important risk factors for the spread of antibiotic resistant bacteria worldwide. Currently, there are no data on the prevalence of carriage of antibiotic resistant strains in population of Rotterdam.

### Study objective

The objective of the study is to determine the prevalence of antibiotic resistant *E. coli*, *S. aureus* and *K. pneumoniae* strains in residents of Rotterdam visiting general practitioners in neighborhoods with low socioeconomic status (achterstandswijken).

Our secondary objectives are:

1. To examine potential associations between the presence of antibiotic resistance and risk factors such as antibiotic use, travel history, hospital

admissions and workplace.

2. To assess the feasibility of the study design in this particular setting of Rotterdam in anticipation of a larger population-wide prevalence study in Rotterdam.

### **Study design**

Cross-sectional prevalence study.

This is a pilot study, which next to assessing the primary and secondary outcomes of the study, also determines feasibility in order to develop a more comprehensive surveillance system in the neighborhoods of Rotterdam and develop preventive interventions.

### **Study burden and risks**

After informed consent, nasal and perianal swabs will be collected from the participants along with a short questionnaire. This represents a very mild burden for the participant, but does not produce any benefit because the study is anonymous. However, there is a large potential public health benefit for the community.

## **Contacts**

### **Public**

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### **Scientific**

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## **Trial sites**

## Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

1. Adult (18 years and older)
2. Physically and mentally able to consent and participate (capacitated)
3. Resident of Rotterdam
4. Officially enrolled in the GP practice where enrollment takes place
5. Provides informed consent

### Exclusion criteria

All those not eligible according to the inclusion criteria. Additionally, a potential subject who shows inability to communicate with the research team in Dutch or otherwise, will also be excluded from the participation in the study.

## Study design

### Design

**Study type:** Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Other

### Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 15-03-2016

Enrollment:	400
Type:	Anticipated

## Ethics review

Approved WMO	
Date:	13-07-2016
Application type:	First submission
Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)
Approved WMO	
Date:	05-09-2017
Application type:	Amendment
Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

### In other registers

Register	ID
CCMO	NL56740.078.16