

# Chlamydia Screening 2008-2010: results, conclusions and recommendations

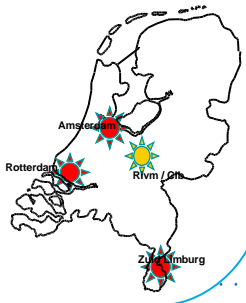
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## Fact sheet Chlamydia Screening 1 Dec 2010

### Background

In 2003, the prevalence of chlamydia infection in the Netherlands was estimated to be 2.1% among young people aged 15-29, with the highest rate (3.2%) in larger cities (CT pilot study 2003). Since then, the number of diagnosed cases of chlamydia has risen and although more and more people are being tested, the percentage of positive diagnoses is not decreasing. The Health Council of the Netherlands therefore decided that a major chlamydia screening programme should be implemented.

The chlamydia screening began in April 2008 in three regions: Amsterdam, Rotterdam and South Limburg. Implementation and evaluation of the first three screening rounds is now in its final stages. This fact sheet outlines the main results.



**Aims:** To evaluate the feasibility and effectiveness of chlamydia screening in the short and long term and to calculate the cost effectiveness of screening.

### Methods

#### Chlamydia Screening

- Systematic population-wide screening via internet
- 16-29 year olds, sexually active
- Annual screening rounds
- Retest after six months for chlamydia positives
- Risk score in South Limburg with selection score

#### Evaluation

- Invitations district by district
- Online risk/behaviour questionnaire
- Acceptance and non-response questionnaires
- Treatment questionnaire for chlamydia positives
- Modelling
- Cost effectiveness analysis

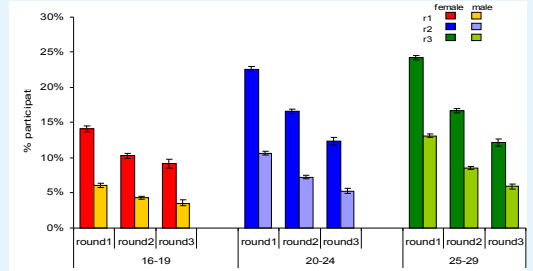
### Participation

#### Invitations

In the first two rounds, approximately 280,000 invitations were sent out each year. For the third round, only the first 75,000 invitations are included in this analysis.

#### Participants

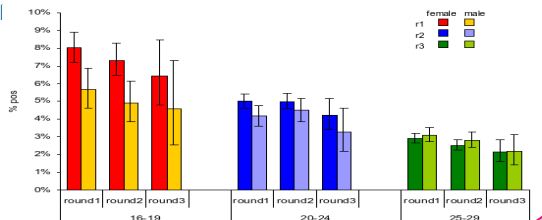
- A total of 82,650 people were tested for chlamydia.
- The participation rate of 16% in round one went down to 11% in round two and 8% in round three. Of the young people who received three invitations, 23% participated one or more times.



- Women participated more often than men.
- Young people under the age of 20 participated less often than people aged 20-29.
- Young people from high-risk districts participated less often than those from medium- to low-risk districts.
- Young people with a Dutch background participated more often than those with a non-Dutch background.

### Chlamydia infections

- Over 630,000 invitations were sent out in three rounds and this led to the detection of 3735 infections.
- In the first round, 4.2% of the participants tested positive to chlamydia, in the second round 4.0% and in the third round 3.5%.
- For the different regions, it was: Rotterdam 5.1%-4.9%-4.5% (round 1,2,3); Amsterdam 3.6%-3.4%-2.9%; Limburg 5.1%-4.7%-3.8%.
- The risk score for selecting participants in Limburg worked well



## Chlamydia infections (continued)

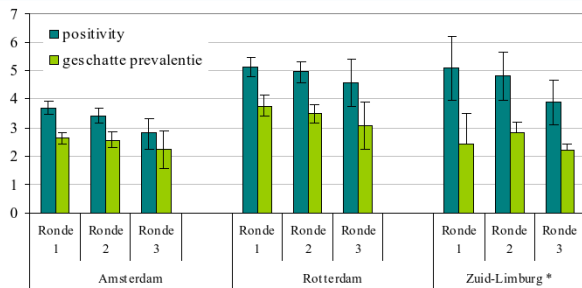
- The chlamydia percentage is higher among young people under the age of 20 (7.3%); girls in this age group tested positive more often than boys (8.0% and 5.7% respectively).
- In a small group who took part each year (2.2%), the positivity rate was much lower in the third year (2.4%) than in round one (6.5%).

## Treatment, retest and partners/ex-partners

- More than 90% of the chlamydia positives went to a doctor within two weeks for treatment.
- 10% of the chlamydia positives were found to be infected again when retested after six months.
- 80% of the chlamydia positives who were in a relationship said that their partner had also had treatment.
- Most of the participants told any ex-partner(s) about the screening and 12% of these participants also provided their names for the screening; one-third of the ex-partners participated and 29% of them tested positive for chlamydia.

## Effectiveness

- Participation rates were lower than in the 2003 CT pilot study.
- 70% of the non-participants said they had a legitimate reason for this (taken no risks, recently tested or not yet sexually active). People who took part more than once included those with risk behaviour.
- More people were tested in the chlamydia screening programme than in mainstream STI care (STI clinics and general practitioners) in the three regions in 2008-2009, but the number of infections found in mainstream care was 3-5 times higher.
- The percentage of positive diagnoses decreased slightly from round one to round three, but the screening had no proven and statistically significant effect on reducing estimated prevalence among the population of 16-29 year olds.



\* Estimated prevalence was calculated from CT positivity using a weighting method. South Limburg: prevalence estimates given as the lowest and highest range, Amsterdam and Rotterdam: prevalence estimates with reliability intervals.

- Districts with later screening periods have a higher estimated prevalence than districts that had already had the first or second screening rounds. Although the differences are insignificant, we see this effect in all regions.

## Effectiveness (continued)

- Modelling forecasts show that continuous screening and unchanged participation rates would result in a limited but stable reduction in CT prevalence in the target population (effect less than -0.8%). If participation rates were to drop further, however, CT prevalence would reach its original levels again.

## Cost effectiveness

- Chlamydia screening does not cut costs, and low participation rates as seen in this programme are unlikely to make it cost effective.

## Conclusions

- The Chlamydia screening programme is a workable system for the GGD Municipal Health Services.
- The screening contributed to the detection of chlamydia infections (3735 infections found).
- Participation rates were lower than expected in the first round and dropped even further in the following rounds. On the other hand, there was a high participation rate in the retest six months later by chlamydia positives (68%).
- Screening results showed a reduction in chlamydia positivity in the short term among the participants. Whether this could lead to a significant reduction in prevalence among the population in the long term is as yet unclear.
- The cost of chlamydia screening is not cancelled out by the cost of any complications which have been prevented.

## Recommendations

- Given the results until now, we would not yet advise rolling out chlamydia screening in this way nationwide.
- Continuation of the chlamydia screening for another year to follow the trends in participation.
- Further studies into interventions to increase participation rates.
- Calculation of the cost effectiveness of alternative screening scenarios.
- Research into the consequences of chlamydia for the quality of life to substantiate QALY estimates.

### For more information about the screening

General: Soa Aids Nederland  
 Amsterdam: GGD Amsterdam 0031 (0)20-5555703  
 Rotterdam: GGD Rotterdam-Rijnmond 0031 (0)10-4339966  
 South Limburg: GGD South Limburg 0031 (0)43-8506264  
 Evaluation: RIVM Centre for Infectious Disease Control Netherlands 0031 (0)30-2744068

You can also go to: [www.chlamydiatest.nl](http://www.chlamydiatest.nl) en [http://www.soaids-professionals.nl/soahiv\\_bestrijding/chlamydia screening](http://www.soaids-professionals.nl/soahiv_bestrijding/chlamydia screening)