

Mumps outbreak among students in the Netherlands, 2011: Pilot study to confirm mumps infection by filter paper blood serology

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a. To assess the burden of mumps in the student population.b. To describe the risk factors for mumps virus infection (symptomatic and asymptomatic). c. To determine the relative contribution of household transmission and transmission at the party to...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Viral infectious disorders
Study type	Observational invasive

Summary

ID

NL-OMON34590

Source

ToetsingOnline

Brief title

Mumps outbreak among students

Condition

- Viral infectious disorders

Synonym

mumps, parotitis epidemica

Research involving

Human

Sponsors and support

Primary sponsor: Rudolf Magnus Instituut

Source(s) of monetary or material Support: RIVM

Intervention

Keyword: disease burden, mumps, outbreak, risk factors

Outcome measures

Primary outcome

The primary outcome of interest is symptomatic mumps.

Secondary outcome

The secondary outcome of interest is mumps virus infection, and the tertiary outcomes of interest will be mumps related complications (orchitis, meningitis, pancreatitis) and hospitalisation.

Study description

Background summary

Since the beginning of December 2009, the incidence of mumps has increased in the Netherlands. The majority of cases are among students who have been vaccinated with at least one dose of MMR vaccine. A review of routine surveillance data revealed that approximately 30 cases had attended a four-day student party hosted in a student association building in Leiden, and implicated the party as the possible source of infection.

Mumps vaccination is included in the Dutch National Immunisation Programme (Rijksvaccinatieprogramma (RVP)). It is therefore important to investigate which risk factors play a role in acquisition of mumps virus, and to characterize this outbreak among vaccinated students. Besides, the 'correlate for protection' (the immunity level (antibodies or cellular immunity) of an individual above which he/she is protected against infection) will be investigated.

Study objective

- a. To assess the burden of mumps in the student population.
- b. To describe the risk factors for mumps virus infection (symptomatic and asymptomatic).

- c. To determine the relative contribution of household transmission and transmission at the party to the incidence of symptomatic mumps.
- d. To study the contribution of asymptomatic infection to the total number of mumps virus infections.

Study design

The study is an observational cohort study conducted among students, in which a questionnaire and samples (oral fluid and finger-prick blood) for microbiological testing are obtained from participants. The following persons are eligible to participate: Members of student corpora in Utrecht, Leiden and Delft who indicated in the pre-screening questionnaire that they could be contacted for microbiological sampling.

Study burden and risks

The individual participant does not have benefit in participating to this study. He/she does benefit indirectly since the study aims to improve the National Immunisation Programme, and it is only a small effort which is needed from the participants.

Collection of fingerprick blood may be a little painful. The lancet which pricks the finger is in a plastic protective shield and is sterile. The needle is not exposed after use of the lancet and cannot be reused. Risk of infecting another via the lancet is therefore very unlikely.

Contacts

Public

Rudolf Magnus Instituut

Postbus 1, postvak 75
3720 BA Bilthoven
NL

Scientific

Rudolf Magnus Instituut

Postbus 1, postvak 75
3720 BA Bilthoven
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years)

Elderly (65 years and older)

Inclusion criteria

Members of the Delft, Utrecht and Leiden student corps who have filled in an online questionnaire (pre-screening) and indicated that they agree with additional research.

Exclusion criteria

None

Study design

Design

Study type: Observational invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Basic science

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 07-02-2011

Enrollment: 298

Type: Actual

Ethics review

Approved WMO

Date: 10-01-2011

Application type: First submission

Review commission: METC Universitair Medisch Centrum Utrecht (Utrecht)

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

CCMO

ID

NL33454.041.10