Zoonoses in the night

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To increase our knowledge about bats as a potential source of zoonotic viruses in the Netherlands, and to support evidence-based development and evaluation of prevention and management tools against (in)direct virus transmission from bats to humans...

Ethical review	Approved WMO
Status	Pending
Health condition type	Other condition
Study type	Observational invasive

Summary

ID

NL-OMON46420

Source ToetsingOnline

Brief title ZITN

Condition

• Other condition

Synonym infectious diseases, zoonosis

Health condition

inventeristie mogelijkheid van virusoverdracht van vleermuis naar mens

Research involving

Human

Sponsors and support

Primary sponsor: Universitair Medisch Centrum Source(s) of monetary or material Support: ZonMw

Intervention

Keyword: bat, serology, virus, zoonosis

Outcome measures

Primary outcome

We will develop serological assays that detect exposure to identified bat viruses.

We will test 300 human sera. With this quantity we can detect an antibody prevalence of over 1%, at the 95% confidence interval.

The results will support assessments on the needs for and the development of

preventive interventions against virus transmission from bats to humans.

Secondary outcome

- Reported level of bat contact (data coming from the questionnaire) and presence of antibodies against bat viruses (data coming from serology study) will be related to each other, to profession, ethnical background, gender and age, to identify possible risk factors. This will only be possible if statistically sound, which depends on the results of the questionnaire and serology study.

- potentially, clinical signs after contact with a bat, and relatedness of the clinical signs to seroconversion in the volunteer

Study description

Background summary

The emergence of infectious diseases such as Ebola viral disease, Zika virus disease, and Middle East respiratory syndrome (MERS) is an important public health problem. While the risk of such emergence events in developed countries like the Netherlands is small, both public concern and potential health and economic consequences are large. The majority of (newly) emerging diseases come from wildlife, either directly or via intermediate hosts.

Study objective

To increase our knowledge about bats as a potential source of zoonotic viruses in the Netherlands, and to support evidence-based development and evaluation of prevention and management tools against (in)direct virus transmission from bats to humans.

We have three research questions to reach this objective:

1. What is the range of viruses present in prioritized bat species, and how does this vary in time, place, and breeding cycle?

2. What is the evidence for transmission of key viruses from bats to humans and cats (as intermediate hosts)?

3. What is the level of contact between bats and people and what is their risk perception and knowledge of bats?

This METC only involves part of research question 2 and 3. In the subsequent sections we will only go into research question 2 and 3: the collection of human sera and the questionnaire.

Study design

The study design for research question 2 is observational, cross-sectional.

Study burden and risks

In general, the burden for the participants is one venous blood sample of 10 mL and answering a set of questions that will take approximately 20 minutes. We will not ask the participant to travel, as blood samples are taken during an annual meeting where the participants gather anyway. The exception to the above is when the participant is involved via a visit to the local GGD, after a bat exposure. These participants are asked for two venous blood samples, of 10 mL each: one directly after the exposure, and one 4 weeks post exposure. In addition to the set of questions mentioned above, we ask these participants to report fever within the 4 weeks post exposure period.

Contacts

Public

Selecteer

Wytemaweg 80 Rotterdam 3015 CN NL Scientific Selecteer

Wytemaweg 80 Rotterdam 3015 CN NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age Adults (18-64 years) Elderly (65 years and older)

Inclusion criteria

(regular) contact with bats

Exclusion criteria

none

Study design

Design

Study type:

Observational invasive

4 - Zoonoses in the night 13-05-2025

Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Prevention

Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	26-10-2018
Enrollment:	300
Туре:	Anticipated

Ethics review

Approved WMO	
Date:	23-10-2018
Application type:	First submission
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 CCMO ID NL64612.078.18

5 - Zoonoses in the night 13-05-2025