

Respiratory Health In Northern Europe

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Creator/Principal investigator(s)

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Description

The Respiratory Health in Northern Europe (RHINE) is a follow-up study of participants from seven Northern European centres who participated in European Community Respiratory Health Survey (ECRHS) stage I. The target population for the RHINE study were all subjects (n=21,802) from Reykjavik in Iceland, Bergen in Norway, Umeå, Uppsala and Göteborg in Sweden, Aarhus in Denmark and Tartu in Estonia that participated in stage 1 of the ECRHS (response rate 83.7%). The eligible subjects were sent a postal questionnaire in 1999-2001. In total 16,191 (74.3%) subjects answered the questionnaire. This questionnaire includes questions on respiratory symptoms, asthma, rhinitis, bronchitis, smoking, indoor environment, occupation, early life exposure and sleep disorders.

Part of this population are part of the ECRHS II

The ECRHS II is a follow-up survey of subjects from 14 countries who participated in the clinical phase of ECRHS I (3,4). The study is funded by the European Commission, as well as other sources of funding, as part of their Quality of Life Programme. The participants answered a detailed structured interview about symptoms, exposure to known or suspected risk factors for asthma, occupation and health service utilisation. Blood was taken for measurement of specific IgE to house dust mite, grass, cat and Cladosporium and DNA extraction (not all centres). Spirometry and methacholine challenge was performed. Health related quality of life was assessed by self completed questionnaires: SF-36 and AQLQ. In a sub-sample home visits were made to measure exposure to house dust mites and cat allergens. Throughout the study outdoor exposure to PM2.5, PM10 and NO2 was measured in the centres participating in the study.

A follow up of the RHINE and ECRHS populations was conducted in 2010-2012: RHINE III and ECRHS III

Purpose:

1. To assess the incidence and remission rate of asthma and allergic rhinitis and to determine risk factors in a representative Nordic population sample.
2. To assess the influence of occupational and home related environmental exposure on the development of asthma and allergic rhinitis in Northern Europe.
3. To investigate the association between the menstrual cycle and asthmatic symptoms in women.
4. To assess the incidence and remission of sleep disturbances and determine risk factors including atopy and asthma.

Unit of analysis

[Individual](#)

Time Method

[Longitudinal: Cohort/Event-based](#)

Sampling procedure

[Probability: Simple random](#)

Data format / data structure

[Numeric](#)

Data collection 1

- Mode of collection: Self-administered questionnaire
- Time period(s) for data collection: 1990 – 2010
- Source of the data: Population group

Data collection 2

- Mode of collection: Physical measurements and tests
- Time period(s) for data collection: 1991 – 2012
- Source of the data: Population group

Data collection 3

- Mode of collection: Face-to-face interview
- Time period(s) for data collection: 1991 – 2012
- Source of the data: Population group

Responsible department/unit

Department of Medical Sciences

Research area

[Medical and health sciences](#) (Standard för svensk indelning av forskningsämnen 2011)

[Public health, global health, social medicine and epidemiology](#) (Standard för svensk indelning av forskningsämnen 2011)

[Health](#) (CESSDA Topic Classification)

Keywords

[Risk factors](#), [Women](#), [Asthma](#), [Environmental exposure](#), [Sleep wake disorders](#), [Menstrual cycle](#), [Rhinitis, allergic](#), [Swedish cohort consortium \(scc\)](#), [Cohorts.se](#)

Publications

Gunnbjörnsdóttir MI, Franklin KA, Norbäck D, Björnsson E, Gislason D, Lindberg E, Svanes C, Omenaas E, Norrman E, Jøgi R, Juel Jensen E, Dahlman-Höglund A, Janson C; RHINE Study Group. Prevalence and incidence of respiratory symptoms in relationship to indoor dampness: the RHINE study. *Thorax* 2006; 61:221-225.

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Modig L, Torén K, Janson C, Järvholm B, Forsberg B. Vehicle exhausts outside the home and onset of asthma among adults. A prospective cohort study. Eur Respir J 2009; 33: 1258-1264

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Accessibility level

Access to data through an external actor

Access to data is restricted

Homepage

[The study homepage](#)

Contact for questions about the data

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