

Information about the Nord-Trøndelag Hospital Trust's Sepsis registry:

About the register

Sepsis occurs when an infection triggers an overreaction in the body's immune system. This causes reduced function in one or more of the body's organs, and can lead to both late sequelae and death. An increasing resistance to antibiotics makes these infections harder to treat.

In Helse Nord-Trøndelag HF (Nord-Trøndelag Hospital Trust), all patients who has or develops infection with sepsis are registered in the Nord-Trøndelag Hospital Trust's Sepsis registry (Sepsisregisteret). This is a quality and research register for patients belonging to Nord-Trøndelag Hospital Trust. The data collection has taken place continuously since 1994.

How the register is used

The purpose of the register is:

- 1) Quality control internally, to be able to evaluate the quality of our treatment of sepsis and the occurrence of resistant bacteria in our region.
- 2) Research with purpose of finding new knowledge about sepsis and antibiotic resistance.

Who can participate?

The study is based on laboratory data and information from the patient's journal. All patients who has been hospitalized with sepsis after 1994 can participate.

All patients with positive blood culture in Nord-Trøndelag Hospital Trust will receive a letter with information about the register. The letter is also containing information about deregistration.

What does participation in the register involve?

Everyone who works with the register has a duty of confidentiality, and these employees reviews all journals where there are proven positive blood culture.

The register collects information about age, medical history, where the infection occurred, the course of the infection and how it was treated. The information is processed confidentially, and by only a few employees with access to the system.

Researchers can get access to anonymous data for research studies after approval from [Regional Committees for Medical and Health Research Ethics \(REC\)](#) and recommendation from [Data Access Committee \(DAC\)](#) in Nord-Trøndelag Hospital Trust.

Anonymous data means that name and birth number no longer are attached to your data, but replaced with a random project number. None of the researchers will know whom they get the data from.

Your privacy and rights

[Personopplysningsloven](#) and [helseregisterloven](#) with regulations secures that your privacy weighs heavily when your health data is collected, stored and used.

There are technical systems, which limits how many employees' sees your birth number linked to your health data, and those who do also have duty of confidentiality. You have the right to know which information is collected about you. By contacting the project leader of the register, you can also get information about who has gotten access to your data. You can also keep your data from being included in research projects.

Master's degrees

Coming

Doctoral degrees

[NTNU Open: Early identification and risk factors for sepsis-clinical and epidemiological studies](#)

[NTNU Open: Risk and prognosis of bloodstream infections: The influence of obesity and lifestyle, genetic variation, and clinical factors present at the time of infection: The HUNT study and the Nord-Trøndelag Bacteremia registry](#)

[NTNU Open: Bloodstream infection at Levanger Hospital, Mid-Norway, 2002-2013: Incidence, mortality, antimicrobial resistance, antibiotic treatment, and impact of statin prophylaxis](#)

Publications

1. [Epidemiology and outcome of *Staphylococcus aureus* bloodstream infection and sepsis in a Norwegian county 1996-2011: an observational study](#)
Paulsen J, Mehl A, Askim Å, Solligård E, Åsvold BO, Damås JK.

BMC Infect Dis. 2015 Mar 4;15:116. doi: 10.1186/s12879-015-0849-4.

2. Prior statin use and 90-day mortality in Gram-negative and Gram-positive bloodstream infection: a prospective observational study

Mehl A, Harthug S, Lydersen S, Paulsen J, Åsvold BO, Solligård E, Damås JK, Edna TH.

Eur J Clin Microbiol Infect Dis. 2015 Mar;34(3):609-17. doi: 10.1007/s10096-014-2269-6. Epub 2014 Nov 6.

3. Epidemiology and outcome of sepsis in adult patients with Streptococcus pneumoniae infection in a Norwegian county 1993-2011: an observational study

Askim Å, Mehl A, Paulsen J, DeWan AT, Vestheim DF, Åsvold BO, Damås JK, Solligård E.

BMC Infect Dis. 2016 May 23;16:223. doi: 10.1186/s12879-016-1553-8.

4. Early identification of sepsis in hospital inpatients by ward nurses increases 30-day survival

Torsvik M, Gustad LT, Mehl A, Bangstad IL, Vinje LJ, Damås JK, Solligård E.

Crit Care. 2016 Aug 5;20(1):244. doi: 10.1186/s13054-016-1423-1.

5. Trends in antimicrobial resistance and empiric antibiotic therapy of bloodstream infections at a general hospital in Mid-Norway: a prospective observational study

Mehl A, Åsvold BO, Kümmel A, Lydersen S, Paulsen J, Haugan I, Solligård E, Damås JK, Harthug S, Edna TH.

BMC Infect Dis. 2017 Feb 2;17(1):116. doi: 10.1186/s12879-017-2210-6.

6. Burden of bloodstream infection in an area of Mid-Norway 2002-2013: a prospective population-based observational study

Mehl A, Åsvold BO, Lydersen S, Paulsen J, Solligård E, Damås JK, Harthug S, Edna TH.

BMC Infect Dis. 2017 Mar 11;17(1):205. doi: 10.1186/s12879-017-2291-2.

7. Erratum to: Trends in antimicrobial resistance and empiric antibiotic therapy of bloodstream infections at a general hospital in mid-Norway: a prospective observational study

Mehl A, Åsvold BO, Kümmel A, Lydersen S, Paulsen J, Haugan I, Solligård E, Damås JK, Harthug S, Edna TH.

BMC Infect Dis. 2017 Jun 23;17(1):446. doi: 10.1186/s12879-017-2545-z.

8. Associations of obesity and lifestyle with the risk and mortality of bloodstream infection in a general population: a 15-year follow-up of 64 027 individuals in the HUNT Study

Paulsen J, Askim Å, Mohus RM, Mehl A, Dewan A, Solligård E, Damås JK, Åsvold BO.

Int J Epidemiol. 2017 Oct 1;46(5):1573-1581. doi: 10.1093/ije/dyx091.

9. Association of iron status with the risk of bloodstream infections: results from the prospective population-based HUNT Study in Norway

Mohus RM, Paulsen J, Gustad L, Askim Å, Mehl A, DeWan AT, Afset JE, Åsvold BO, Solligård E, Damås JK.

Intensive Care Med. 2018 Aug;44(8):1276-1283. doi: 10.1007/s00134-018-5320-8.
Epub 2018 Jul 23.

10. Anxiety and Depression Symptoms in a General Population and Future Risk of Bloodstream Infection: The HUNT Study

Askim Å, Gustad LT, Paulsen J, Reitan SK, Mehl A, Mohus RM, Dewan A, Damås JK, Solligård E, Åsvold BO.
Psychosom Med. 2018 Sep;80(7):673-679. doi: 10.1097/PSY.0000000000000619.

11. The Role of FER rs4957796 in the Risk of Developing and Dying from a Bloodstream Infection: A 23-Year Follow-up of the Population-based Nord-Trøndelag Health Study

Rogne T, Damås JK, Flatby HM, Åsvold BO, DeWan AT, Solligård E.
Clin Infect Dis. 2020 Jun 17:ciaa786. doi: 10.1093/cid/ciaa786. Online ahead of print.
PMID: 32699877

12. Cardiometabolic Traits, Sepsis, and Severe COVID-19: A Mendelian Randomization Investigation

Ponsford MJ, Gkatzionis A, Walker VM, Grant AJ, Wootton RE, Moore LSP, Fatumo S, Mason AM, Zuber V, Willer C, Rasheed H, Brumpton B, Hveem K, Kristian Damås J, Davies N, Åsvold BO, Solligård E, Jones S, Burgess S, Rogne T, Gill D.
Circulation. 2020 Nov 3;142(18):1791-1793. doi:
10.1161/CIRCULATIONAHA.120.050753. Epub 2020 Sep 23.
PMID: 32966752 Free PMC article. No abstract available.

13. Body mass index and risk of dying from a bloodstream infection: A Mendelian randomization study

Rogne T, Solligård E, Burgess S, Brumpton BM, Paulsen J, Prescott HC, Mohus RM, Gustad LT, Mehl A, Åsvold BO, DeWan AT, Damås JK.
PLoS Med. 2020 Nov 16;17(11):e1003413. doi: 10.1371/journal.pmed.1003413.
eCollection 2020 Nov.
PMID: 33196656 Free PMC article. Clinical Trial.

Legal authority

The register has legal authority in the privacy regulation of the EU, article 6 nr. 1, letter e and article 9 nr. 2, letter i and j. The register also has legal authority in [Forskrift om medisinske kvalitetsregister](#) § 3-2-a and § 3-5)

For researchers

The Nord-Trøndelag Hospital Trust's Sepsis registry is happy to contribute with data for research projects. You can read about completed projects in the overview of publications.

Below you will find the codebook for the register, and otherwise information for access to our data.

We will need the following information from you:

Protocol

Approval from REK (If needed)

Approval from DAC

DPIA in partnership with local privacy representative

Variable list

Other relevant information linked to your project

Send the application to Sepsisregisteret@helse-nordtrondelag.no

Codebooks:

[Variabelliste Sepsisregisteret](#)

Contact information

Project leader

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Learning tools

E-learning course via Læringsportalen: [Stopp sepsis – Hva er sepsis](#)