



# Danish Registry Reviews

- Recommendations from the Danish Society of Pharmacoepidemiology -

## Background

Most Danish registries have previously been reviewed. However, reviews may over time become outdated for several reasons:

- The registries or the methods for which they can be used in research change over time
- The application procedures and legislation may change
- Validations of a registry may provide new insights into the quality of the data that may justify updates of existing reviews

As a consequence, there is a constant need to stay updated on the most useful and accurate reviews of commonly used Danish registries and their use for pharmacoepidemiological research.

## Aims

With this position paper, the Danish Society for Pharmacoepidemiology aims to provide a common platform where researchers can access a recommended list of Danish registry reviews.

## Recommendations

Below you will find list of recommended reviews of the main Danish administrative registries, classic medical registries, and clinical quality databases along with a timeline for their initiation.

**Notifications of new reviews are welcome at [morten.schmidt@clin.au.dk](mailto:morten.schmidt@clin.au.dk).**

**On behalf of the board for the Danish Society for Pharmacoepidemiology**

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## Timeline for initiation of Danish registries

*Clin Epidemiol* 2015;7:449–90

1870: Danish Twin Registry
1925: Danish Registry of Cerebral Paresis
1937: Registry of Tuberculosis
1943: Danish Cancer Registry; Registry of Causes of Death
1949: Danish Multiple Sclerosis Registry; Military Conscription Registry
1968: Danish Civil Registration System; Cytogenetic Register
1969: Central Psychiatric Registry
1970: Income Statistics Register; Suicide registry
1973: Medical Birth Registry; Register of Legally Induced Abortions
1974: Student Register
1976: Danish Breast Cancer Cooperative Group Database; Employment Classification Module
<b>1977: Danish National Patient Registry</b>
1979: Central Register of Labour Market Statistics; Aarhus Sarcoma Registry
1980: Integrated Database for Labour Market Research; Fertility Database
1981: Population's Education Register; Building and Housing Register
1982: Danish Pacemaker and ICD Registry
1983: Danish Register of Congenital Malformations
1985: Danish Registry of Childhood Cancer; Melanoma Database
1989: Regional Prescription Databases; Register for Suicide Attempts; National Vascular Registry
1990: Nephrology Registry; National Health Service Register; Laboratory Database
1994: Danish Colorectal Cancer Database; In Vitro Fertilisation Register
1995: Danish National Prescription Database; Hip Arthroplasty Registry
1996: Danish Multiple Sclerosis Treatment Registry
1997: Danish Transfusion Database; Pathology Database; Knee Arthroplasty Registry
1993: Western Denmark Heart Registry
2000: Danish Heart Registry; Acute Leukemia Registry; Rheumatology Database; Lung Cancer; Bladder Cancer Database
2002: Danish Database for Hepatitis B and C
2003: Danish Stroke Registry; Heart Failure Registry; Schizophrenia Database; Lymphoma Database
2004: Danish Database of Reimbursed Prescriptions; Hysterectomy Database; Anesthesia Database; Geriatric Database
2005: Danish Cruciate Ligament Registry; Gynecological Cancer Database; Myelomatosis Database
2006: Danish National Diabetes Registry; Shoulder Alloplasty Registry; Pancreatic Cancer Database
2007: Danish Intensive Care Database; GP Database; Non-Melanoma Skin Cancer Database; COPD Database
2008: Danish Cervical Cancer and Mammography Screening Databases; Fetal Medical Database
2009: Danish Sarcoma Database; Children's Cancer Database; Neuro-Oncology Database
2010: Danish Prostate Cancer Database; Renal Cancer Database; Sleep Apnea Database; Organ Donation Database
2011: Danish Penile Cancer Database; Depression Database; ADHD Database; Ocular Oncology Database
2013: Danish Testicular Cancer Database; Heart Rehabilitation Database; Liver and Bile Duct Cancer Database
2014: Danish Colorectal Cancer Screening Database

## Administrative registries

### **The Danish National Prescription Registry / Den National Receptdatabase**

→ Pottegård A, Schmidt S, Wallach Kildemoes H, et al. Data Resource Profile: The Danish National Prescription Registry. *Int J Epidemiol*. 2016..

### **The Danish National Database of Reimbursed Prescriptions**

→ Johannesdottir SA, Horvath-Puho E, Ehrenstein V, et al. Existing data sources for clinical epidemiology: The Danish National Database of Reimbursed Prescriptions. *Clin Epidemiol* 2012;**4**:303–13.

### **Aarhus University Prescription Database / Aarhus Universitets Receptdatabase**

→ Ehrenstein V, Antonsen S, Pedersen L. Existing data sources for clinical epidemiology: Aarhus University Prescription Database. *Clin Epidemiol* 2010;**2**:273–9.

### **Medstat.dk, Kvartalstal medicin, Kvartalstal medicin / The Danish online Drug use statistics**

→ Schmidt M, Hallas J, Laursen M, Friis S. Data Resource Profile: The Danish online drug use statistics (MEDSTAT). *Int J Epidemiol*. In press

### **The Civil Registration System / CPR-registret**

→ Schmidt M, Pedersen L, Sørensen HT. The Danish Civil Registration System as a tool in epidemiology. *Eur J Epidemiol* 2014;**29**:541–9.

### **The Danish National Patient Registry / Landspatientregistret**

→ Schmidt M, Schmidt SAJ, Sandegaard JL, et al. The Danish National Patient Registry: a review of content, data quality, and research potential. *Clin Epidemiol* 2015;**7**:449–90.

### **The Danish Psychiatric Central Research Register / Det Centrale psykiatrisregister**

→ Mors O, Perto GP, Mortensen PB. The Danish Psychiatric Central Research Register. *Scand J Public Health* 2011;**39**:54–7.

### **The Danish Register of Causes of Death / Dødsårsagsregistret**

→ Helweg-Larsen K. The Danish Register of Causes of Death. *Scand J Public Health* 2011;**39**:26–9.

### **Income Statistics Register / Indkomstregistret**

→ Baadsgaard M, Quitzau J. Danish registers on personal income and transfer payments. *Scand J Public Health* 2011;**39**:103–5.

### **The clinical laboratory information system / Laboratoriedatabasen**

→ Grann AF, Erichsen R, Nielsen AG, et al. Existing data sources for clinical epidemiology: The clinical laboratory information system (LABKA) research database at Aarhus University, Denmark. *Clin Epidemiol* 2011;**3**:133–8.

### **Danish education registers / Uddannelsesregistre**

→ Jensen VM, Rasmussen AW. Danish education registers. *Scand J Public Health* 2011;**39**:91–4.

### **The Building and Housing Register**

→ Christensen G. The Building and Housing Register. *Scand J Public Health* 2011;**39**:106–8.

### **Income Statistics Register / Indkomstregistret**

→ Baadsgaard M, Quitzau J. Danish registers on personal income and transfer payments. *Scand J Public Health* 2011;**39**:103–5

## Classic medical registries

### **The Danish Cancer Registry / Cancerregistret**

→ Gjerstorff ML. The Danish Cancer Registry. *Scand J Public Health* 2011;**39**:42–5.

### **The Western Denmark Heart Registry / Vestdansk Hjertedatabase**

→ Schmidt M, Maeng M, Jakobsen C-J, *et al.* Existing data sources for clinical epidemiology: The Western Denmark Heart Registry. *Clin Epidemiol* 2010;**2**:137–44.

### **Western Denmark Cardiac Computed Tomography Registry / Vestdansk hjerte-CT database**

→ Nielsen LH, Nørgaard BL, Tilsted HH, *et al.* The Western Denmark Cardiac Computed Tomography Registry: a review and validation study. *Clin Epidemiol* 2015;**7**:53–64.

### **Medical Birth Registry / Det Medicinske Fødselsregister**

→ Bliddal M, Broe A, Pottgård A, *et al.* The Danish Medical Birth Register. *Eur J Epidemiol.* 2018

## Danish clinical quality databases

### **The Danish Adult Diabetes Registry**

→ Jørgensen ME, Kolding J, Reventlov Husted G, *et al.* The Danish Adult Diabetes Registry. *Clin Epidemiol* 2016; **8**:429–34.

### **The Danish Anaesthesia Database**

→ Antonsen K, Rosenstock CV, Lundstrøm LH. *Clin Epidemiol* 2016; 8:435-438

### **The Danish Bladder Cancer Database**

→ Hansen E, Larsson H, Nørgaard M, Thind P, Jensen JB, *Clin Epidemiol* 2016; 8:439-443

### **Danish Breast Cancer Cooperative Group**

→ Christiansen P, Ejlersen B, Jensen MB, Mouridsen H. *Clin Epidemiol* 2016; 8:445-449

### **The Danish Cardiac Rehabilitation Database**

→ Zwisler AD, Rossau HK, Nakano A, Foghmar S, Eichhorst R, Prescott E, Cerqueira C, Soja AMB, Gislason GH, Larsen ML, Andersen UO, Gustafsson I, Thomsen KK, Boye Hansen L, Hammer S, Viggers L, Christensen B, Kvist B, Lindstrøm Egholm C, May O. *Clin Epidemiol* 2016; 8:451-456

### **The Danish Cerebral Palsy Follow-up Program**

→ Rasmussen HM, Nordbye-Nielsen K, Møller-Madsen B, Johansen M, Ellitsgaard N, Pedersen CR, Rackauskaite G, Engberg H, Pedersen NW. *Clin Epidemiol* 2016; 8:457-460

### **Danish Childhood Cancer Registry**

→ Schrøder H, Rechnitzer C, Wehner PS, Rosthøj S, Møller JK, Lausen B, Petersen G, Nørgaard M. *Clin Epidemiol* 2016; ,8:461-464

**Danish Colorectal Cancer Group Database**

→ Ingeholm P, Gögenur I, Iversen LH. Clin Epidemiol 2016; 8:465-468

**The Danish database for acute and emergency hospital contacts**

→ Lassen AT, Jørgensen H, Jørsboe HB, Odby A, Brabrand M, Steinmetz J, Mackenhauer J, Kirkegaard H, Christiansen CF. Clin Epidemiol 2016; 8:469-474

**The Danish Depression Database**

→ Videbech P, Deleuran A. Clin Epidemiol 2016; 8:475-478

**The Danish Fetal Medicine Database**

→ Ekelund CK, Kopp TI, Tabor A, Petersen OB. Clin Epidemiol 2016; 8:479-483

**Danish Gynecological Cancer Database**

→ Sørensen SM, Bjørn SF, Jochumsen KM, Jensen PT, Thranov IR, Hare-Bruun H, Seibæk L, Høgdall C. Clin Epidemiol 2016; 8:485-490

**The Danish Head and Neck Cancer database**

→ Overgaard J, Jovanovic A, Godballe C, Grau Eriksen J. Clin Epidemiol 2016; 8:491-496

**The Danish Heart Failure Registry**

→ Schjødt I, Nakano A, Egstrup K, Cerqueira C. Clin Epidemiol 2016; 8:497-502

**The Danish Heart Registry**

→ Özcan C, Juel K, Flensted Lassen J, von Kappelgaard LM, Mortensen PE, Gislason G. Clin. Epidemiol 2016; 8:503-508

**The Danish Hip Arthroplasty Register**

→ Gundtoft PH, Varnum C, Pedersen AB, Overgaard S. Clin Epidemiol 2016; 8:509-514

**The Danish Hysterectomy and Hysteroscopy Database**

→ Topsoe MF, Ibfelt EH, Settnes A. Clin Epidemiol 2016; 8:515-520

**The Danish Inguinal Hernia Database**

→ Friis-Andersen H, Bisgaard T. Clin Epidemiol 2016; 8:521-524

**The Danish Intensive Care Database.** Christiansen CF, Møller MH, Nielsen H, Christensen S. Clin Epidemiol 2016; 8:525-530

**The Danish Knee Ligament Reconstruction Registry**

→ Rahr-Wagner L, Lind M. Clin Epidemiol 2016; 8:531-535

**The Danish Lung Cancer Registry**

→ Jakobsen E, Rasmussen TR. Clin Epidemiol 2016; 8:537-541

**The Danish Melanoma Database**

→ Hölmich LR, Klausen S, Spaun E, Schmidt G, Gad D, Svane IM, Schmidt H, Lorentzen HF, Ibfelt EH. Clin Epidemiol 2016; 8:543-548

**The Danish Multiple Sclerosis Treatment Register**

→ Magyar M, Koch-Henriksen N, Sørensen PS. Clin Epidemiol 2016; 8:549-552

### **The Danish National Acute Leukemia Registry**

→ Østgård LSG, Nørgaard JM, Raaschou-Jensen KK, Pedersen RS, Rønnov-Jessen D, Pedersen PT, Dufva IH, Marcher CW, Nielsen OJ, Severinsen MT, Friis LS. Clin Epidemiol 2016; 8:553-560

### **The Danish National Chronic Lymphocytic Leukemia Registry**

→ da Cunha-Bang C, Geisler CH, Enggaard L, Poulsen CB, de Nully Brown P, Frederiksen H, Bergmann OJ, Pulczynski EJ, Pedersen RS, Nielsen LH, Christiansen I, Niemann CU. Clin Epidemiol 2016; 8:561-565

### **The Danish National Chronic Myeloid Neoplasia Registry**

→ Bak M, Ibfelt EH, Stauffer Larsen T, Rønnov-Jessen D, Pallisgaard N, Madelung A, Udby L, Hasselbalch HC, Bjerrum OW, Andersen CL. Clin Epidemiol 2016; 8:567-572

### **The Danish National Database for Obstructive Sleep Apnea**

→ Jennum PJ, Larsen P, Cerqueira C, Schmidt T, Tønnesen P. Clin Epidemiol 2016; 8:573-576

### **Danish National Lymphoma Registry**

→ Arboe B, Josefsson P, Jørgensen J, Haaber J, Jensen P, Poulsen C, Rønnov-Jessen D, Pedersen RS, Pedersen P, Frederiksen M, Pedersen M, de Nully Brown P. Clin Epidemiol 2016; 8:577-581

### **The Danish National Multiple Myeloma Registry**

→ Gimsing P, Holmström MO, Klausen TW, Andersen NF, Gregersen H, Pedersen RS, Plesner T, Pedersen PT, Frederiksen M, Frølund U, Helleberg C, Vangsted A, de Nully Brown P, Abildgaard N. Clin Epidemiol 2016; 8:583-587

### **The Danish National Penile Cancer Quality database**

→ Jakobsen JK, Öztürk B, Sjøgaard M. Clin Epidemiol 2016; 8:589-594

### **The Danish National Quality Database for Births**

→ Andersson CB, Flems C, Kesmodel US. Clin Epidemiol 2016; 8:595-599

### **The Danish National Register for Asthma**

→ Backer V, Lykkegaard J, Bodtger U, Agertoft L, Korshøj L, Braüner EV. Clin Epidemiol 2016; 8:601-606

### **The Danish National Registry for Biological Therapy in Inflammatory Bowel Disease**

→ Larsen L, Jensen MD, Larsen MD, Nielsen RG, Thorsgaard N, Vind I, Wildt S, Kjeldsen J. Clin Epidemiol 2016; 8:607-612

### **The Danish Registry of Diabetic Retinopathy**

→ Andersen N, Hjortdal JØ, Schielke Kc, Bek T, Grauslund J, Laugesen CS, Lund-Andersen H, Cerqueira C, Andresen J. Clin Epidemiol 2016; 8:613-619

### **The Danish Nephrology Registry**

→ Heaf J. Clin Epidemiol 2016; 8:621-627

### **The Danish Neuro-Oncology Registry**

→ Hansen S. Clin Epidemiol 2016; 8:629-632

### **The Danish Nonmelanoma Skin Cancer Dermatology Database**

→ Lamberg AL, Sølvsten H, Lei U, Vinding GR, Stender IM, Jemec GB, Vestergaard T, Thormann H, Hædersdal M, Dam TN, Olesen AB. Clin Epidemiol 2016; 8:633-636

**Danish Palliative Care Database**

→ Groenvold M, Adersen M, Hansen MB. Clin Epidemiol 2016; 8:637-643

**Danish Pancreatic Cancer Database**

→ Fristrup C, Detlefsen S, Hansen CP, Ladekarl M. Clin Epidemiol 2016; 8:645-648

**The Danish Prostate Cancer Database**

→ Nguyen-Nielsen M, Høyer S, Friis S, Hansen S, Brasso K, Jakobsen EB, Moe M, Larsson H, Sjøgaard M, Nakano A, Borre M. Clin Epidemiol 2016; 8:649-653

**The Danish Quality Database for Cervical Cancer Screening**

→ Rygaard C. Clin Epidemiol 2016; 8:655-660

**Danish Quality Database for Mammography Screening**

→ Mikkelsen EM, Njor SH, Vejborg I. Clin Epidemiol 2016; 8:661-666

**The Danish quality database for prehospital emergency medical services**

→ Frischknecht Christensen E, Berlac PA, Nielsen H, Christiansen CF. Clin Epidemiol 2016; 8:667-671

**Danish Register of chronic obstructive pulmonary disease**

→ Lange P, Tøttenborg SS, Sorknæs AD, Andersen JS, Sjøgaard M, Nielsen H, Thomsen RW, Nielsen KA. Clin Epidemiol 2016; 8:673-678

**Danish Registry of Childhood and Adolescent Diabetes**

→ Svensson J, Cerqueira C, Kjærsgaard P, Lyngsøe L, Hertel NT, Madsen M, Mortensen HB, Johannesen J. Clin Epidemiol 2016; 8:679-683

**The Danish Sarcoma Database**

→ Jorgensen PH, Lausten GS, Pedersen AB. Clin Epidemiol 2016; 8:685-690

**The Danish Schizophrenia Registry**

→ Baandrup L, Cerqueira C, Haller L, Korshøj L, Voldsgaard I, Nordentoft M. Clin Epidemiol 2016; 8:691-695

**The Danish Stroke Registry**

→ Johnsen SP, Ingeman A, Hunborg HH, Schaarup SZ, Gyllenborg J. Clin Epidemiol 2016; 8:697-702

**The Danish Testicular Cancer database**

→ Daugaard G, Kier MGG, Bandak M, Mortensen MS, Larsson H, Sjøgaard M, Toft BG, Engvad B, Agerbæk M, Holm NV, Lauritsen J. Clin Epidemiol 2016; 8:703-707

**Danish Urogynaecological Database**

→ Hansen UD, Gradel KO, Larsen MD. Clin Epidemiol 2016; 8:709-712

**The Danish Vascular Registry, Karbase**

→ Eldrup N, Cerqueira C, de la Motte L, Rathenborg LK, Hansen AK. Clin Epidemiol 2016; 8:713-718

**The Danish Ventral Hernia Database – a valuable tool for quality assessment and research**

→ Helgstrand F, Jorgensen LN. Clin Epidemiol 2016; 8:719-723

**The database of the Danish Renal Cancer Group**

→ Petersen AC, Søggaard M, Mehnert F, Larsen EH, Donskov F, Azawi NH, Kromann-Andersen B. Clin Epidemiol 2016; 8:725-729

**National Database of Geriatrics**

→ Kannegaard PN, Vinding KL, Hare-Bruun H. Clin Epidemiol 2016; 8:731-735

**The Danish nationwide clinical register for patients with rheumatoid arthritis: DANBIO**

→ Ibfelt EH, Jensen DV, Hetland ML. Clin Epidemiol 2016; 8:737-742