International collaboration in occupational health

Michelle Turner

March 29, 2022

OMEGA-NET

Network on the Coordination and Harmonisation of European Occupational Cohorts (OMEGA-NET)

- Goal: To create a network to optimize the coordination and use of occupational, industrial, and population cohorts at the European level to inform evidence-based interventions and policy
- Timeframe: October 2017-April 2022
- Funding: EU Framework Programme Horizon 2020 European Cooperation in Science and Technology (COST Action)
- Budget: €500,000+ for networking tools
- Action Chair: Ingrid Sivesind Mehlum, Norway
- Action Vice-Chair: Michelle C Turner, Spain

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EUROPEAN COOPERATION IN SCIENCE & TECHNOLOGY

Greater coordination and harmonisation of European occupational cohorts is needed

Michelle C Turner,[1,2,3,4] Ingrid Sivesind Mehlum[5]

- Europe currently has many valuable occupational, industrial, and population cohorts
- In recent years there has been very limited coordination and promotion of European health research on occupation and employment, hampering optimal exploitation of these resources
- Relatively limited sample sizes of individual studies and lack of data harmonisation have meant that evidence of potential occupational hazards is often inconsistent and inconclusive

What is a COST Action?

- Bottom-up science and technology networks
- Range of networking tools, such as meetings, workshops, conferences, training schools, short-term scientific missions (STSMs) and dissemination activities
- Researchers throughout Europe can submit proposals through a continuous Open Call or apply to join an existing Action
- Open to international cooperation on the basis of mutual benefit
- Principles of Excellence and Inclusiveness

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Some Previous Coordination Efforts

MODERNET: Monitoring Occupational Diseases and tracing New and Emerging Risks in a NETwork
COST Action IS1002 (2010-2014)

StanDerm: Common European standards on occupational skin disease prevention and patient management
COST Action TD1206 (2012-2016)

Trends in incidence of occupational asthma, contact dermatitis, noise-induced hearing loss, carpal tunnel syndrome and upper limb musculoskeletal disorders in European countries from 2000 to 2012

S Jill Stocks,[1,2] Roseanne McNamee,[3] Henk F van der Molen,[4] Christophe Paris,[5,6] Pavel Urban,[7,8] Giuseppe Campo,[9] Riitta Sauni,[10] Begoña Martínez Jarreta,[11] Madeleine Valenty,[12] Lode Godderis,[13,14] David Miedinger,[15,16] Pascal Jacquetin,[17] Hans M Gravseth,[18] Vincent Bonneterre,[19] Maylis Telle-Lamberton,[20] Lynda Bensefa-Colas,[21,22] Serge Faye,[23] Godewina Mylle,[14] Axel Wannag,[24] Yogindra Samant,[24] Teake Pal,[4] Stefan Scholz-Odermatt,[15,25] Adriano Papale,[9] Martijn Schouteden,[14] Claudio Colosio,[26] Stefano Mattioli,[27] Raymond Agius,[1] Working Group 2; Cost Action IS1002—Monitoring trends in Occupational Diseases and tracing new and Emerging Risks in a NETwork (MODERNET)

- Statistics to compare changes in incidence in occupational diseases between European countries are scarce
- For the first time we have compared trends in incidence of occupational dermatitis, asthma, noise-induced hearing loss, carpal tunnel syndrome and upper limb musculoskeletal disorders between European countries
- Taking a more flexible approach by allowing each country to provide data that is relevant to their individual occupational healthcare systems does not rule out international epidemiological studies

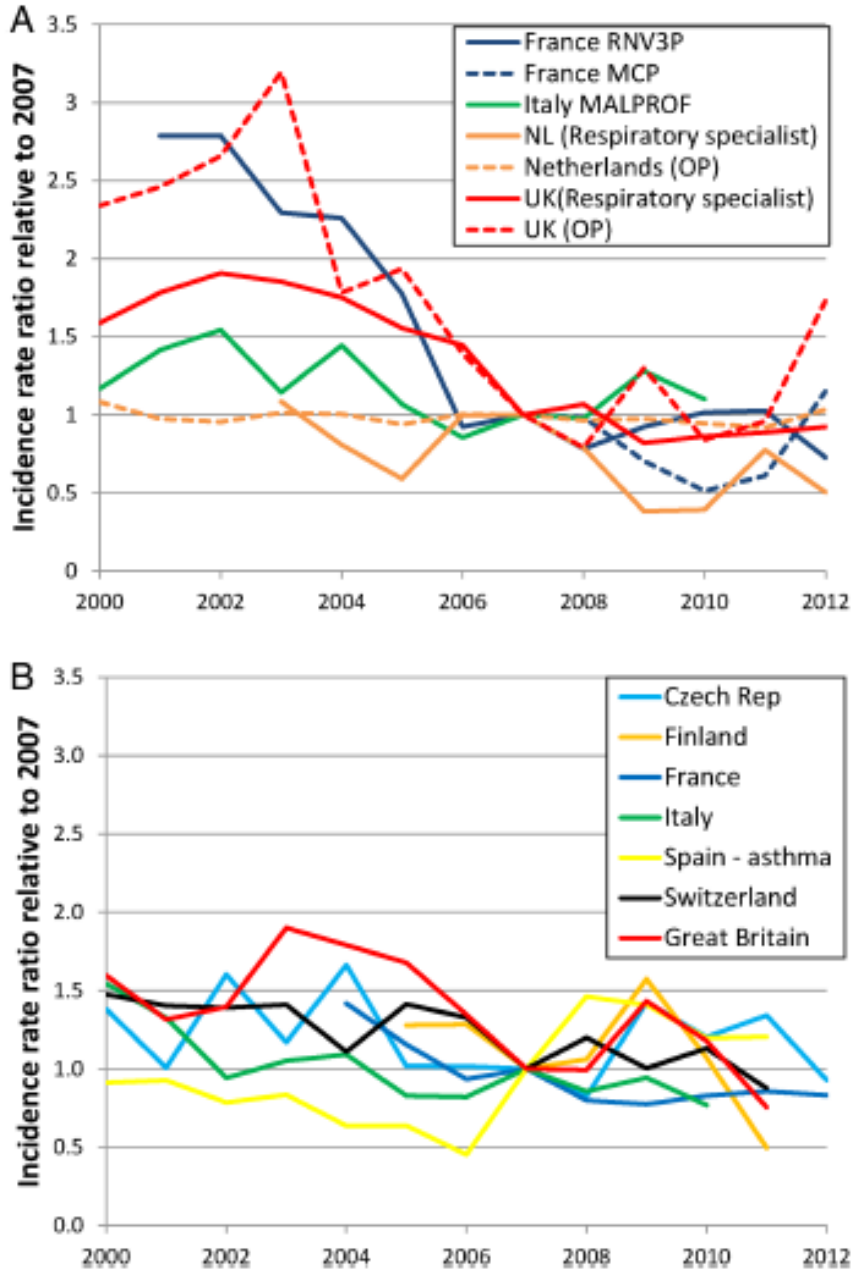

Figure 2 Estimated annual changes in incidence of occupational asthma; physician reported (A) and recognised compensation claims (B).

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Brussels, 23 June 2017

COST 027/17

DECISION

Subject: **Memorandum of Understanding for the implementation of the COST Action "Network on the Coordination and Harmonisation of European Occupational Cohorts" (OMEGA-NET) CA16216**

The COST Member Countries and/or the COST Cooperating State will find attached the Memorandum of Understanding for the COST Action Network on the Coordination and Harmonisation of European Occupational Cohorts approved by the Committee of Senior Officials through written procedure on 23 June 2017.

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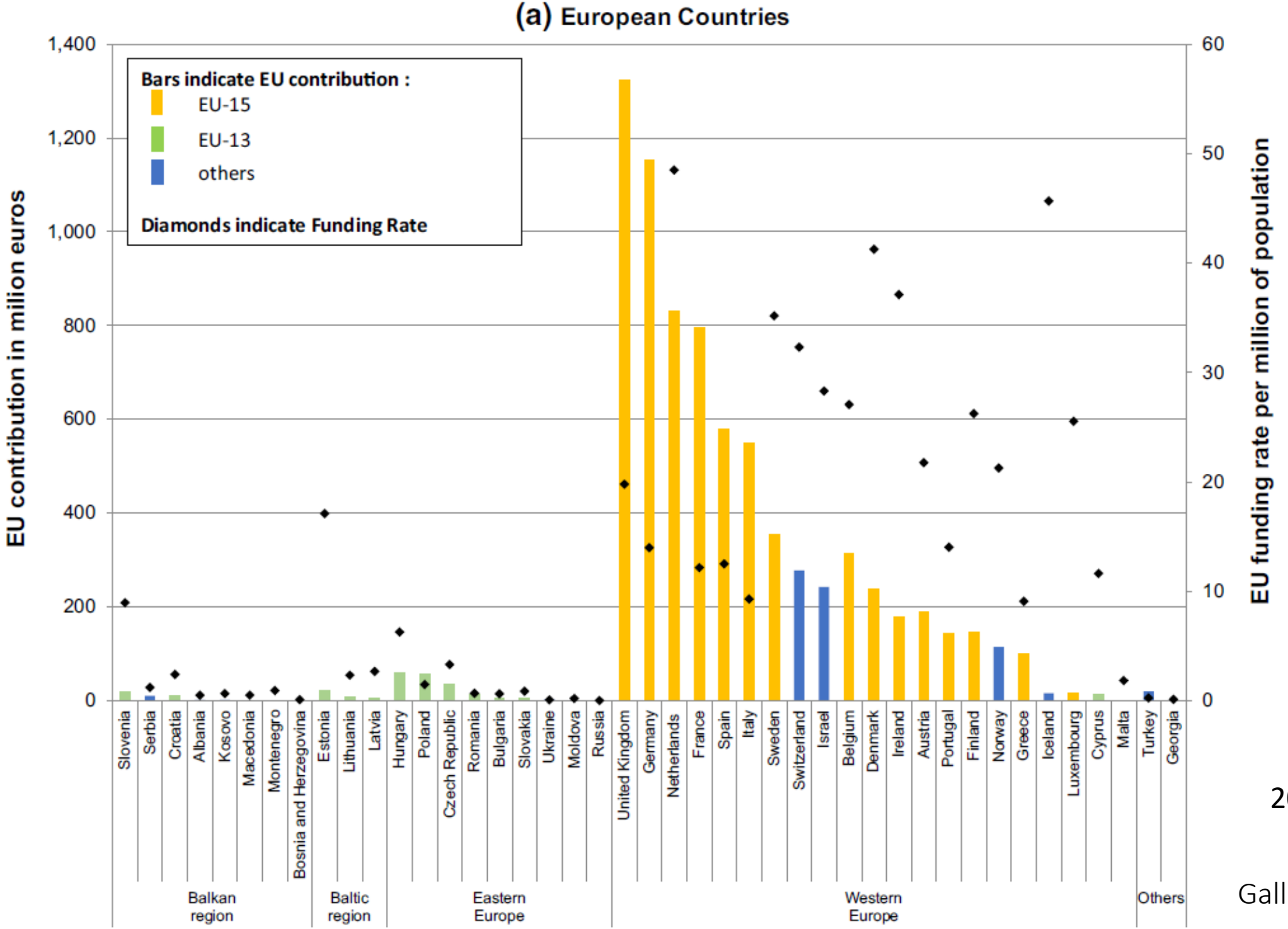
T +32 (0)2 533 3800 | F +32 (0)2 533 3890 | office@cost.eu | www.cost.eu

Funded by the Horizon 2020 Framework Programme of the European Union

OMEGA-NET

Memorandum of Understanding (MoU)

http://www.cost.eu/COST_Actions/ca/CA16216



2014-2020

Gallo et al. (2020)

Impacts	**Scientific impact:** interdisciplinary collaborations leading to breakthrough science p. 26		**Societal impact:** bridging the innovation divide and participation gaps, and brain circulation in the ERA p. 28	
Outcomes/results	Approved common projects on interdisciplinary research p. 20	Coordination of standards, procedures and methods p. 20	New research infrastructure and programmes on societal challenges p. 22	Career advancement for less-connected researchers p. 24
Output	H2020, European and national common research proposals p. 16	Peer-reviewed co-created publications p. 16	New (interdisciplinary) research collaborations for researchers p. 17	New research leadership skills and experience for less-connected researchers p. 18
Activities	 p. 8			
Input	Ideas	Resources	People	

Specific Objectives

- Research Coordination
  1. Coordinate and integrate cohorts on occupational health in Europe
  2. Implement an online interactive tool with detailed information on existing cohorts
  3. Facilitate work on harmonisation of occupational exposure and standardisation of health outcome information and new protocols for data collection
  4. Promote stakeholder engagement from the start of the project
- Capacity Building
  5. Connect scientific communities on occupational health in Europe
  6. Provide networking and leadership opportunities for Early Career Investigators, as well as researchers from COST Inclusiveness Target Countries
  7. Provide training in occupational epidemiology and exposure assessment

Working Groups

1. Inventory of Cohorts
2. Harmonisation of occupational exposure and health outcome information
3. Development of standardised protocols for future occupational exposure and health outcome information, some in the form of position papers
4. Science Communications, Dissemination and Training

Working Group 1: Inventory of Occupational Cohorts

- Leader: Manolis Kogevinas
- Vice Leader: Vivi Schlunssen

- Task 1.1. Inventory of occupational, industrial, and population cohorts and registries.
- Task 1.2. Searchable web-based database: OMEGA-NET Inventory of Occupational Cohorts.

Welcome to Birthcohorts.net

In recent years, a variety of birth cohorts have been established worldwide, and more are in progress. An impetus for this development is the increasing awareness of the long-term health effects of intrauterine and early life combined with a renewed attention to the life-course approach in epidemiology.

The aim of Birthcohorts.net is to facilitate the exchange of knowledge and collaboration between cohorts and researchers. In addition, we would like to provide administrators, policy makers and other stakeholders with information about available cohort data on health and its determinants.

Read more about the background for this website here.

You will find the list of birth cohorts that have provided information to this website in the Inventory of Birth Cohorts together with key information such as number of participants and contact persons. If you click on the cohort name you will learn more about design and data. You can also use the search feature in order to search for cohorts with information on specific exposures, outcomes, biological samples, or health and development.

The inventory is not complete. Principal investigators of birth cohorts not yet included in the inventory are encouraged to register their birth cohort.

www.birthcohorts.net

Which cohorts can be included?

- Cohorts started before or during pregnancy or latest at birth
- Cohorts with at least one year of follow-up
- Cohorts with at least 300 mother-child pairs

Register / edit cohort

To be able to register or edit a cohort, you must login.

Login | Register new cohort

Search

A. View the complete inventory of Birth Cohorts

Click here

B. Search by selecting criterias below

(This performs a search for cohorts with information on selected exposures, outcomes, biological samples or health and development)

Please, be aware that this search may take up to a few minutes.

Choose group

C. Search by region

Choose region

D. Enter keyword(s) to search the inventory

(This performs a search in user names, countries, institution names, contact persons, key references and cohort descriptions)

Welcome to OccupationalCohorts.net

OccupationalCohorts.net aims to make an inventory of all active cohorts in Europe which can be used to explore occupation, work related exposures, employment and health relationships. Gradually the inventory will be expanded to include cohorts globally. The inventory is primarily for research purposes but will also be useful for policymakers.

There are abundant population-based cohorts in Europe and globally with sample sizes ranging from a few hundred to hundreds of thousands that have collected information on occupation or employment. In addition, there are industry/occupation based cohorts and intervention studies in the work environment. OccupationalCohorts.net has as its prime aim to support the use at the European level (and gradually globally) of data generated by past and ongoing cohort studies. The development of an inventory is a first and important prerequisite for such exploitation.

Please also see our complementary inventory of occupational exposure assessment tools at: OccupationalExposureTools.net

For more information **about OccupationalCohorts.net** and to register your cohort in the inventory please click below.

REGISTER

If you would like to register yourself as a user, please follow this link and complete the online registration form

REGISTER

LOGIN

If you are already a registered user, please follow this link to enter the inventory data collection form

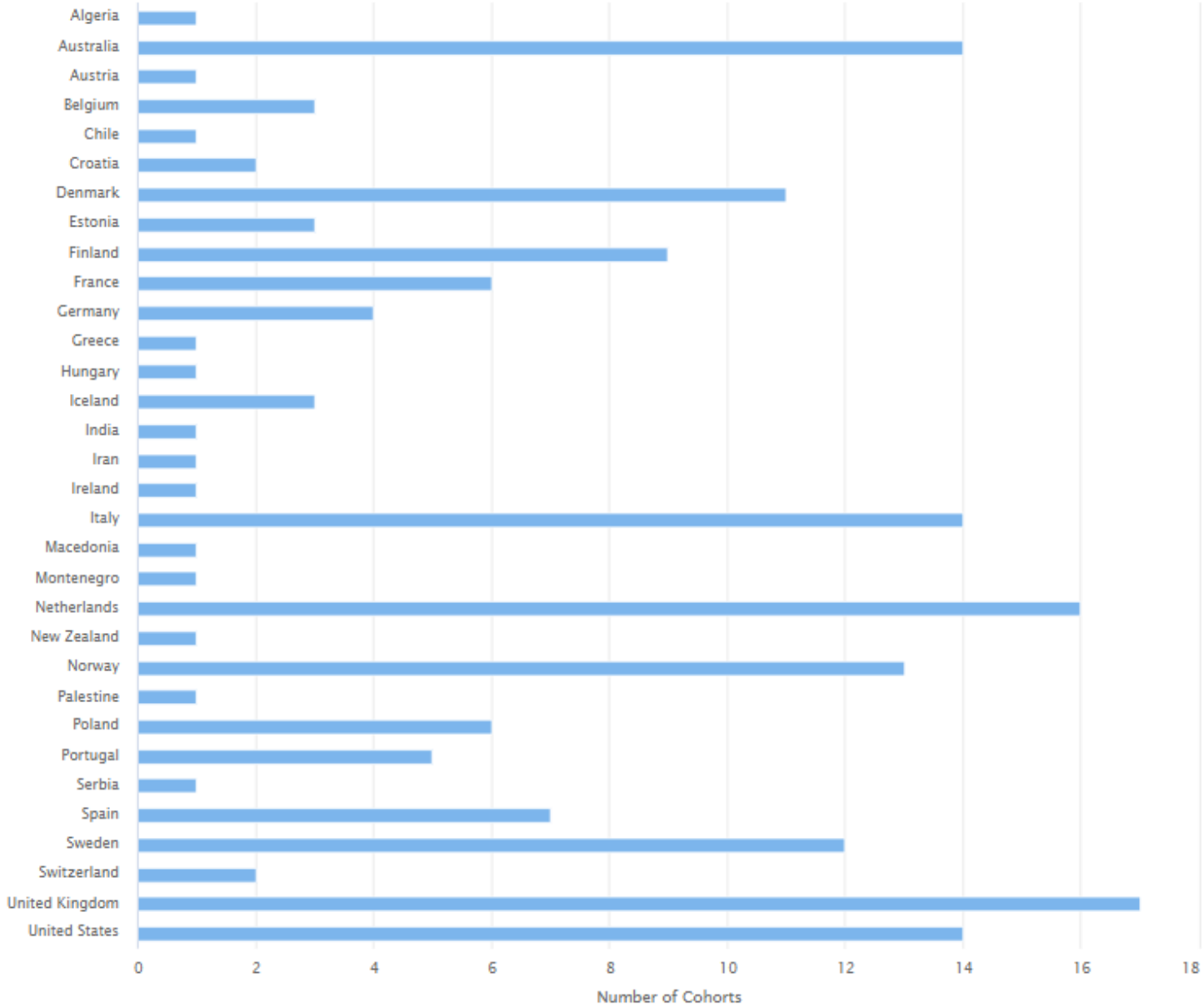
LOGIN

- **More than 140 cohorts registered in the OMEGA-NET inventory**
- **More than 22 million persons in these cohorts**

Which cohorts are included in the inventory?

- Are active or can substantiate that their data is potentially accessible
- Information on occupation and/or industry or at least one occupational exposure
- Have at least one follow-up (cross-sectional studies not included; intervention studies and nested case control studies are included)
- New studies with planned follow-ups can be included
- The inventory is not limited to European cohorts
- Inclusion of a cohort is initially reviewed and accepted by the “OccupationalCohorts.net” coordinators

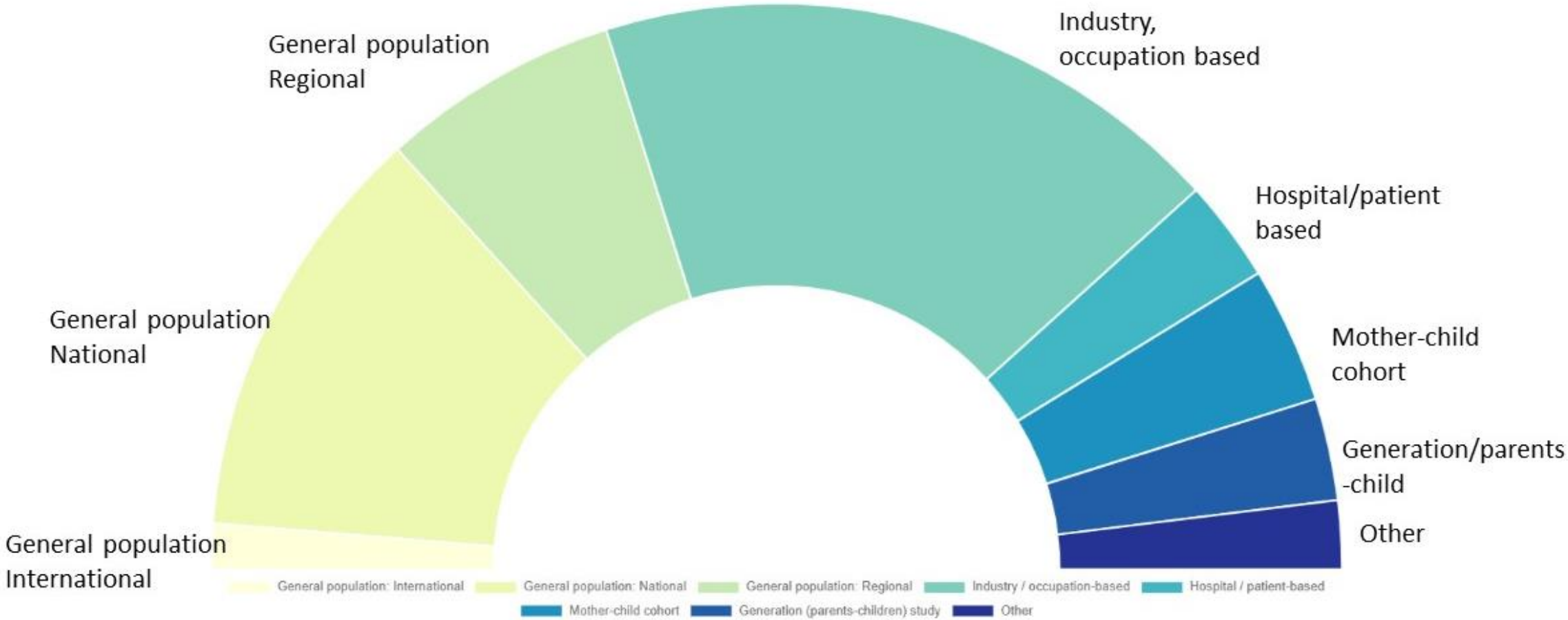
COUNTRY


Algeria
Australia
Austria
Belgium
Chile
Croatia
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Iceland
India
Iran
Ireland
Italy
Macedonia
Montenegro
Netherlands
New Zealand
Norway
Palestine
Poland
Portugal
Serbia
Spain
Sweden
Switzerland
United Kingdom
United States
0
2
4
6
8
10
12
14
16
18
Number of Cohorts

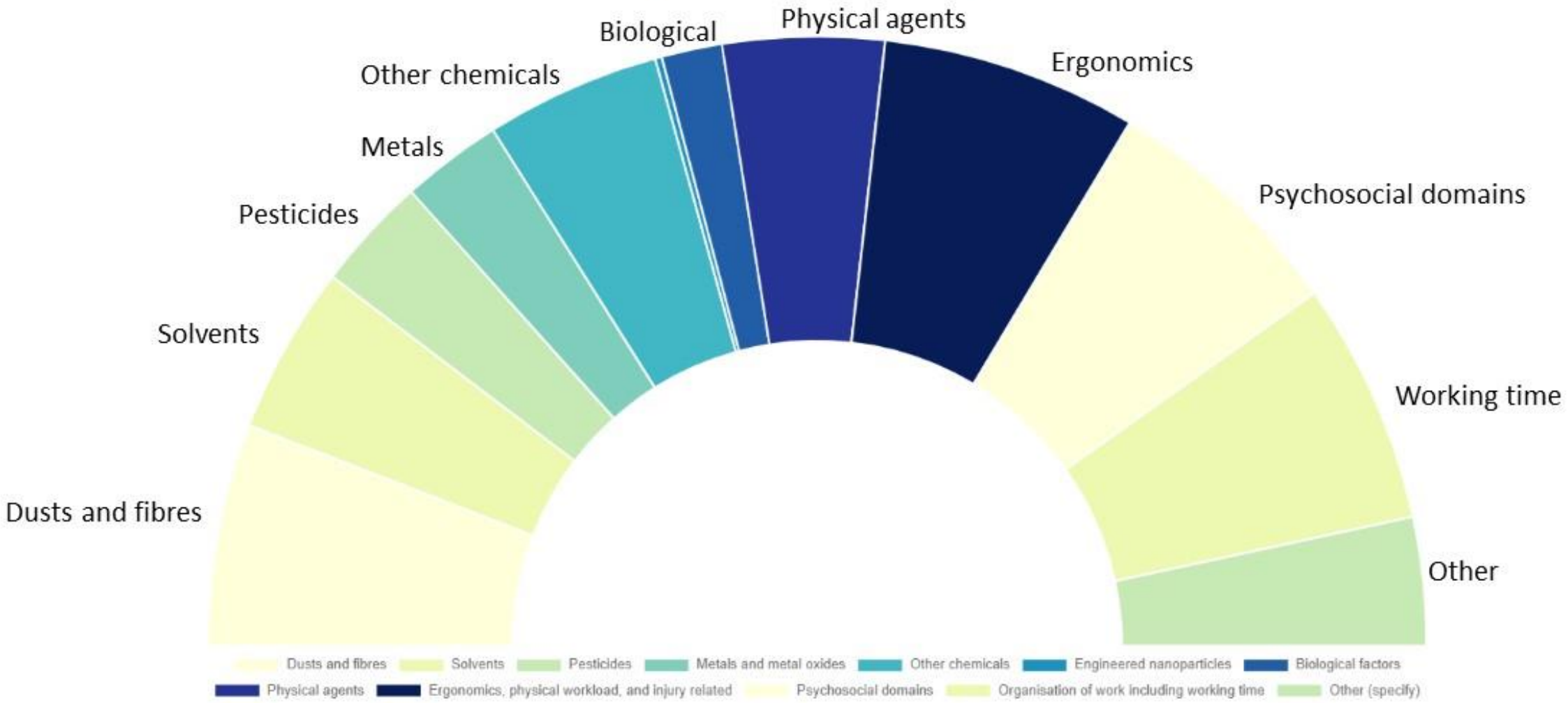
How is information collected?

- Cohorts were initially identified through personal records and contacts, and also through systematic web-based searches
- All information included in the inventory is extracted from the cohorts using a web-based Inventory Questionnaire
- Researchers responsible for the cohorts (*or those responsible for occupational component*) were contacted and asked to register and complete the web-based questionnaire
- If necessary, OccupationaCohorts.net coordinators contact researchers directly and assist with the completion of the questionnaires

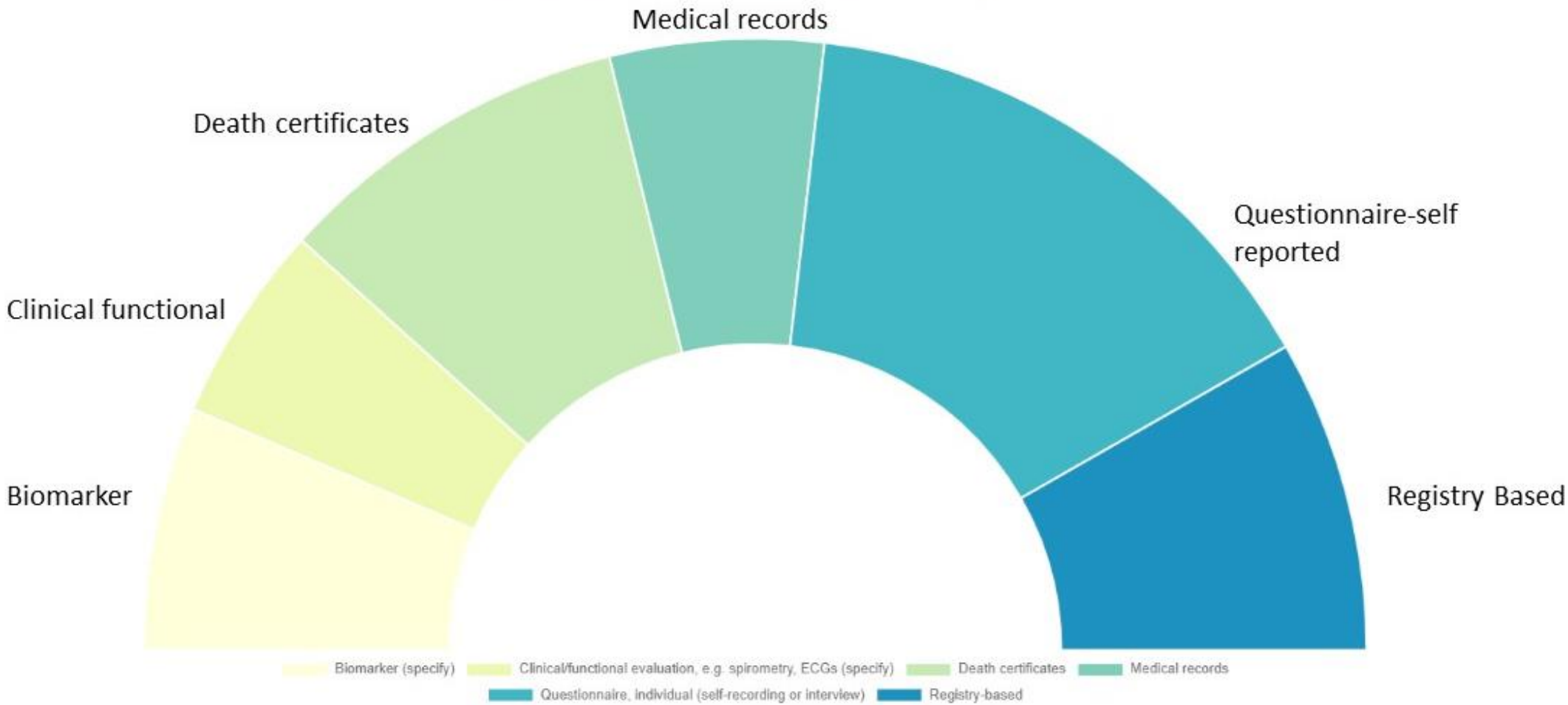
Source Population



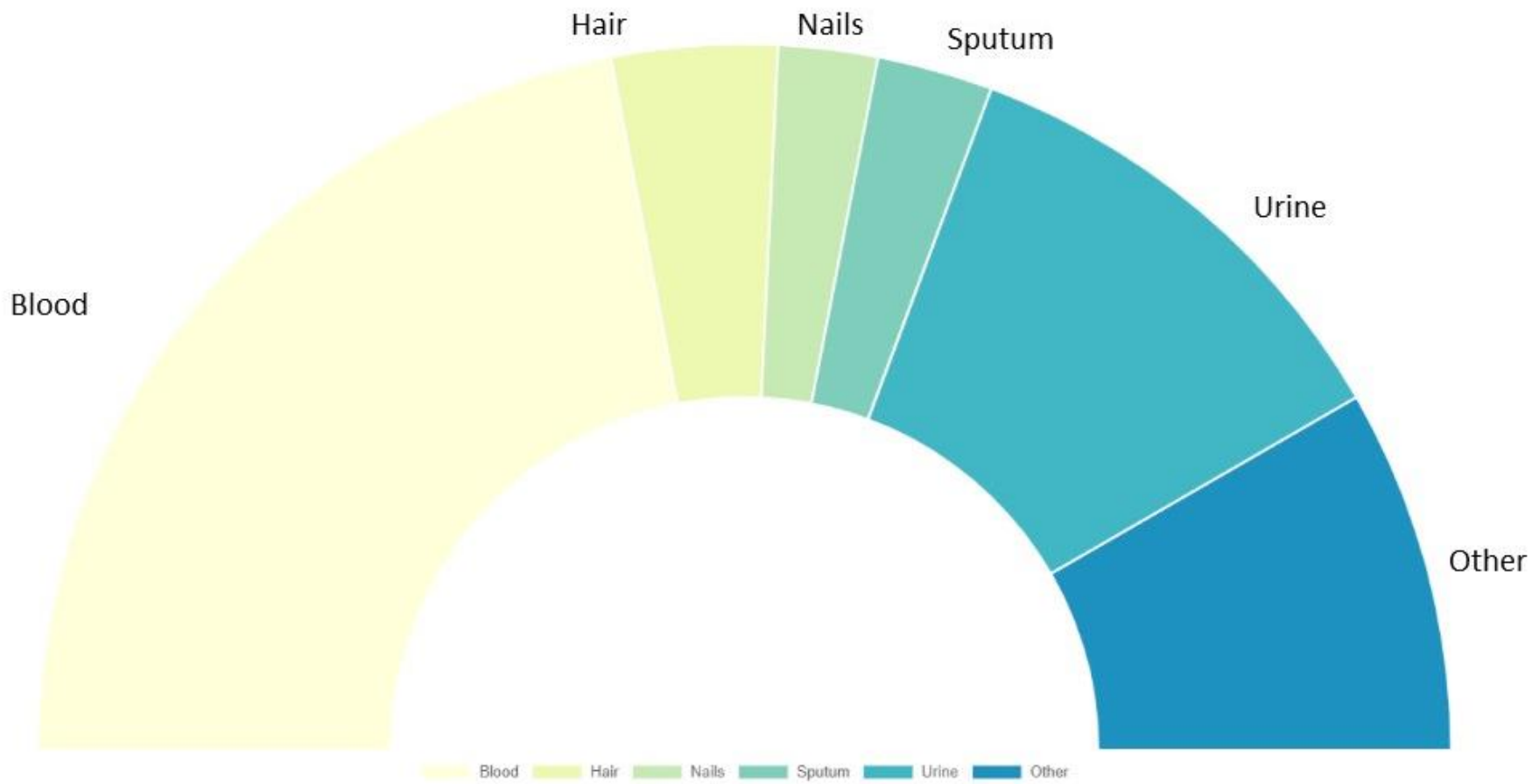
Occupational Exposures



Outcome Follow-up



Biological Samples



How will the information collected for the inventory be used?

- Inventory information is stored in a searchable web database
- Primary data are not available
- Users can search for specific exposures and outcomes, and extract information on the cohorts that have data for the specific topic as well as basic information on the methods used to collect data
- Access to primary data has to be requested to the PI of the study

Inventory

A. View the complete inventory of occupational cohorts

Click here

B. Search by selecting specific criteria below

Occupational Exposure

–

Dusts and Fibres
Solvents
Pesticides
Metals and Metal Oxides
Other Chemicals
Engineered Nanoparticles
Biological Factors
Physical Agents
Ergonomics, Physical Workload, and Injury Related
Psychosocial Domains
Organisation of Work including Working Time
Other (specify)

Health Outcome

–

Biological Sample

–

Biological Processing

–

Genetic and Other Lab Analyses

–

A Bacterial infectious disease, type of microorganisms*
B Viral infections, type of microorganisms*
B99 Other and unspecified infectious diseases, type of microorganisms*
C + D Neoplasms
D Diseases of blood and blood-forming organs excl. leukemia
E Endocrinological disease
E Malnutrition and obesity
E Metabolism disease
F Mental disorders
G Disease in the nervous system
H Disorders of the eye
H Disorders of the ear
I Heart disease
I Cerebrovascular diseases
J Respiratory disease
K Diseases of oral cavity, salivary glands and jaws
K Diseases of oesophagus, stomach, duodenum and appendix
K Hernia, colon and intestine disease
K Diseases of peritoneum, liver

C. Search by country

–

D. Search by keyword

Enter keyword to search

Why do we need an inventory?

- There are abundant population-based cohorts in Europe and globally with sample sizes ranging from a few hundred to a few million that have collected information on occupation or employment
- There are also industry/occupation based cohorts and intervention studies in the work environment
- Many of these cohorts are dynamic and not all available information is published
- Cohorts have different protocols and degree of detail on exposures, outcomes and other factors (e.g. lifestyle)
- The development of the inventory is a first and important prerequisite to support the use global data generated by past and ongoing cohort studies and to promote research on occupational health

Next steps

- Complete inventory with additional cohorts globally
- Update information for registered cohorts
- Editorial and other promotion
- In connection with ongoing projects promote its use
- Secure long term funding

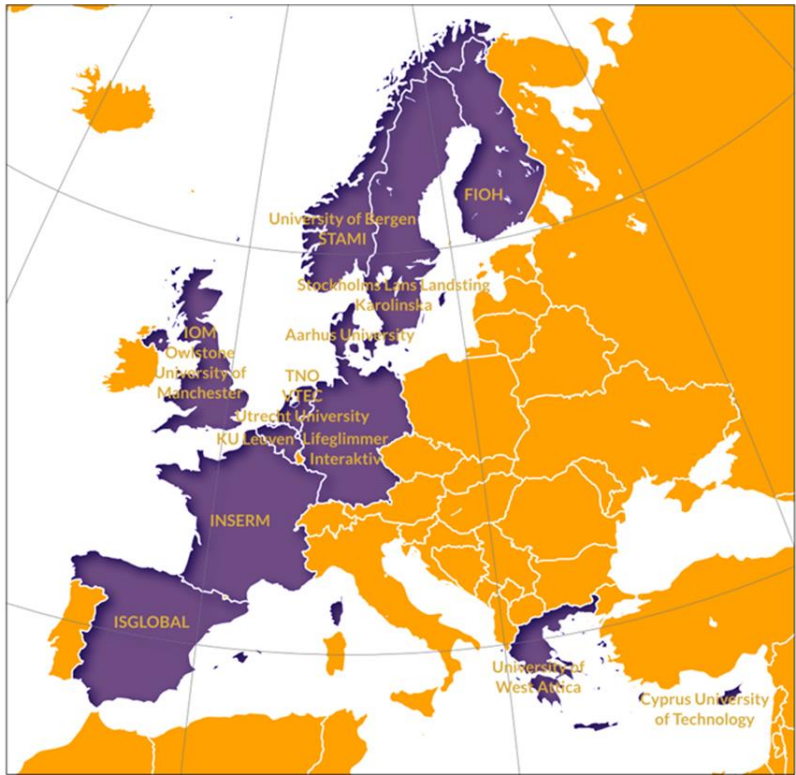
(further develop inventory and harmonize data)

EPHOR Mega Cohort

Work Package Leaders: Ingrid Sivesind Mehlum, Michelle C Turner

To provide new evidence of the impact of occupational exposures on the risk of major non-communicable diseases (NCDs), through both systematic and agnostic analyses of occupational exposures

- Large-scale pooling of 40 existing European cohorts (>20,000,000 participants) using FAIR data infrastructure
- Analyses by job title, EuroJEM exposure, hierarchical approach, measured/monitored occupational exposures
- Cancer, cardiovascular/metabolic, neurodegenerative, musculoskeletal, mental, and respiratory disease, work participation



EPHOR

European Human Exposome NETWORK

Annals of Work Exposures and Health, 2020, 64, No. 6, 565–568
doi: 10.1093/annweh/wxaa039
Advance Access publication 17 June 2020
Commentary

BOHS
The Chartered Society for Worker Health Protection

OXFORD

Commentary

The OMEGA-NET International Inventory of Occupational Cohorts

Manolis Kogevinas[1,2,3,4,*], Vivi Schlünssen[5,6], Ingrid S. Mehlum[7] and Michelle C. Turner[1,2,3,8]

Working Group 2: Harmonization of Existing Occupational Exposure and Outcome Information

- Leader: Roel Vermeulen
- Vice Leader: Merete Drevvatne Bugge

- Task 2.1. Harmonize existing occupational exposure information
- Task 2.2. Harmonize existing outcome information
- Task 2.3. Data management and statistical consultation
- Task 2.4. Ethical issues

OMEGA-NET

OCCUPATIONAL EXPOSURE TOOLS.NET

HOME INVENTORY ABOUT FUNDERS CONTACT INFORMATION DISCLAIMER

Welcome to OccupationalExposureTools.net

OccupationalExposureTools.net aims to provide an inventory of all meta-data on existing occupational exposure information and tools, to support research on occupational epidemiology. It includes meta-data on job exposure matrices (JEMs), national exposure databases (indicating linkage to existing cohorts in the Omega-Net cohort Inventory, where relevant), national and international occupational coding systems and crosswalks to convert between them.

This inventory will serve as a platform to facilitate harmonization of occupational exposure data to allow pooling and replication of findings.

Please also see our complementary inventory of occupational cohorts at: **OccupationalCohorts.net**.

For more information **about OccupationalExposureTools.net** and to register your exposure assessment tool in the inventory please click below.

OCCUPATIONAL EXPOSURE TOOLS.NET

HOME INVENTORY

A. View the complete inventory of Occupational Exposure Tools by category

Select tool...

Select tool...
Job-Exposure Matrix
Exposure Measurement Database
Other Exposures Databases
Coding Systems
Coding Crosswalk

B. Search by selecting specific criteria below

Tool

—

Clear

C. Search by country

Select tool...

D. Search by keyword

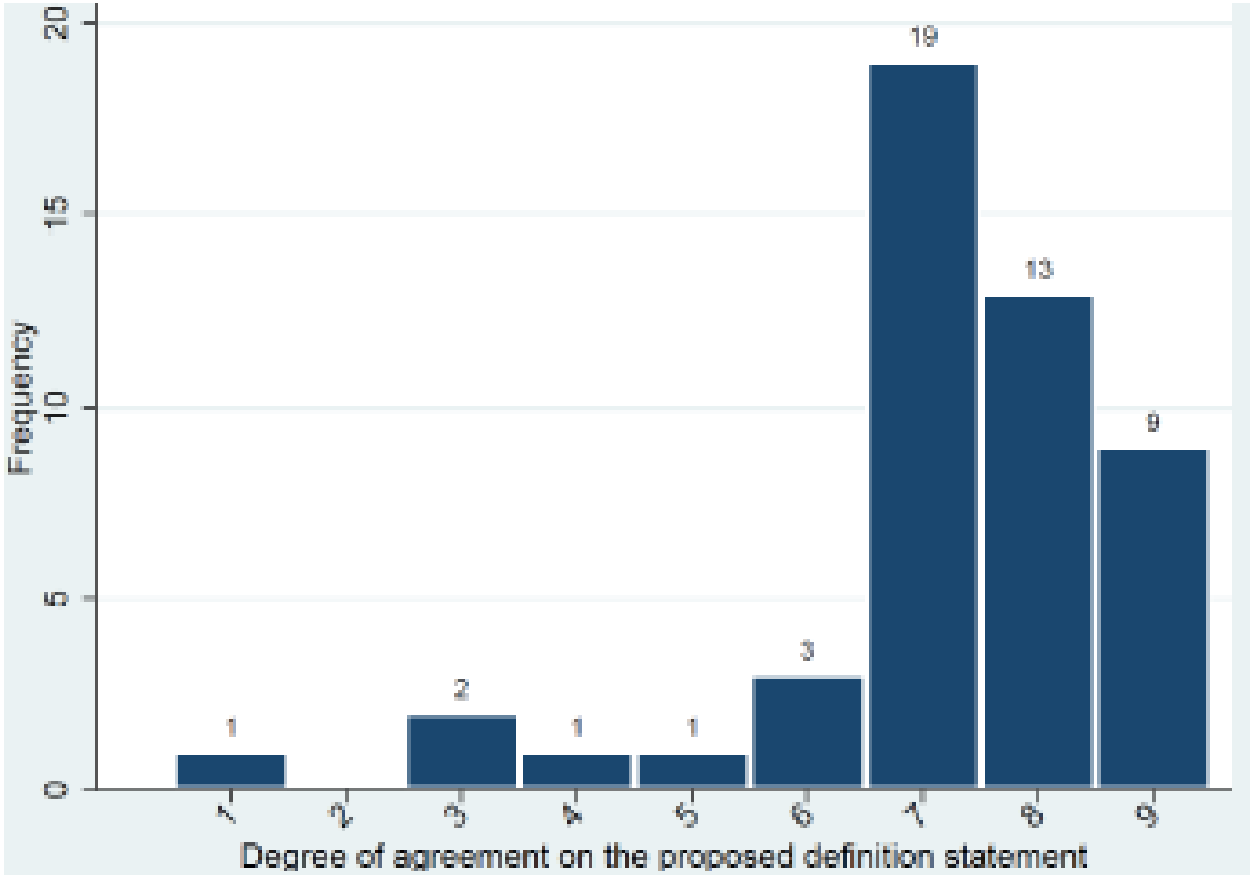
Occupational Exposure Tools

Occupational Exposure Tool	Number
Job-Exposure Matrix	39
Exposure Measurement Database	8
Other Exposures Databases	1
Coding Systems	25
Coding Crosswalks	3

Resulting definition statement

In a worker, **occupational burnout** *is an exhaustion due to prolonged exposure to work-related problems*

Occupational physical AND emotional exhaustion state *(SNOMED CT synonym)*



Review

Scand J Work Environ Health – online first. doi: 10.5271/sjweh.3935

Harmonized definition of occupational burnout: A systematic review, semantic analysis, and Delphi consensus in 29 countries

by Irina Guseva Canu, PhD,[1] Sandy Carla Marca, MSc,[1] Francesca Dell'Oro, PhD,[2,3] Ádám Balázs, PhD,[4] Enrico Bergamaschi, PhD,[5] Christine Besse, MD,[6] Renzo Bianchi, PhD,[7] Jovanka Bislimovska, PhD,[8] Adrijana Koscec Bjelajac, PhD,[9] Merete Bugge, PhD,[10] Carmen Iliana Busneag, MD,[11] Çiğdem Çağlayan, MD,[12] Mariana Cerniţanu, PhD,[13] Cristiana Costa Pereira, PhD,[14,15] Nataša Dernovšček Hafner, PhD,[16] Nadia Droz, MSc,[17] Maija Eglite, PhD,[18] Lode Godderis, PhD,[19] Harald Gündel, PhD,[20] Jari J. Hakanen, PhD,[21] Raluca Maria Iordache, PhD,[22] Imane Khireddine-Medouni, MD,[23] Sibel Kiran, PhD,[24] Francesca Larese-Filon, MD,[25] Catherine Lazor-Blanchet, MD,[17] Patrick Légeron, MD,[26] Tom Loney, PhD,[27] Nicole Majery, MD,[28] Eda Merisalu, MD,[29] Ingrid Sivesind Mehlum, PhD,[10] Laurent Michaud, MD,[30] Dragan Mijakoski, PhD,[31] Jordan Minov, PhD,[31] Alberto Modenese, PhD,[32] Marija Molan, PhD,[33] Henk van der Molen, PhD,[34] Evangelia Nena, PhD,[35] Dusan Nolimal, MD,[36] Marina Otelea, PhD,[37] Elisabeta Pletea, MD,[28] Nurka Pranjic, PhD,[38] David Rebergen, PhD,[39] Jelena Reste, PhD,[40] Eva Schernhammer, MD,[41] Anny Wahlen, MSc [42]

Slide from I Guseva Canu

Molen et al. BMC Musculoskeletal Disorders (2021) 22:169
https://doi.org/10.1186/s12891-021-04031-z

BMC Musculoskeletal Disorders

RESEARCH ARTICLE Open Access

Diagnostic criteria for musculoskeletal disorders for use in occupational healthcare or research: a scoping review of consensus- and synthesised-based case definitions

Henk F. van der Molen[1*], Steven Visser[1], Jose Hernán Alfonso[2], Stefania Curti[3], Stefano Mattioli[3], David Rempel[4], Yves Roquelaure[5], P. Paul F. M. Kuijer[1] and Sietske J. Tamminga[1]

Abstract

Background: The aim of this study was to identify case definitions of diagnostic criteria for specific musculoskeletal disorders (MSDs) for use in occupational healthcare, surveillance or research.

Methods: A scoping review was performed in Medline and Web of Science from 2000 to 2020 by an international team of researchers and clinicians, using the Arksey and O'Malley framework to identify case definitions based on expert consensus or a synthesis of the literature. Seven MSDs were considered: non-specific low back pain (LBP), lumbosacral radicular syndrome (LRS), subacromial pain syndrome (SAPS), carpal tunnel syndrome (CTS), lateral or medial elbow tendinopathy, and knee and hip osteoarthritis (OA). Case definitions for occupational healthcare or research were charted according to symptoms, signs and instrumental assessment of signs, and if reported, on work-related exposure criteria.

Results: In total, 2404 studies were identified of which 39 were included. Fifteen studies (38%) reported on non-specific LBP, followed by knee OA ($n = 8$;21%) and CTS ($n = 8$;21%). For non-specific LBP, studies agreed in general on which symptoms (i.e., pain in lower back) and signs (i.e., absence of red flags) constituted a case definition while for the other MSDs considerable heterogeneity was found. Only two studies (5%), describing case definitions for LBP, CTS, and SAPS and lateral and medial elbow tendinopathy respectively, included work-related exposure criteria in their clinical assessment.

Conclusion: We found that studies on non-specific LBP agreed in general on which symptoms and signs constitute a case definition, while considerable heterogeneity was found for the other MSDs. For prevention of work-related MSDs, these MSD case definitions should preferably include work-related exposure criteria.

Keywords: Case definition, Low back pain, Lumbosacral radicular syndrome, Subacromial pain syndrome, Carpal tunnel syndrome, Lateral or medial elbow tendinopathy, Epicondylitis, Knee osteoarthritis, Hip osteoarthritis, Occupational disease, Occupational healthcare

Table 1 Collating of all reported symptoms, signs and instrumental assessment of signs of the 39 included studies on MSD case definitions

MSD category		Symptoms	Signs	Imaging
Non-specific LBP	Acute	➢ Pain in low back [24, 26, 29, 38, 47, 48, 51] < 1 month [46] to < 12 weeks [36, 37, 39, 40]. ➢ Muscle tension or stiffness in lower back [36, 39]. ➢ Posterior irradiation not below the knee [46].	➢ No "red flags" (e.g. history of cancer, steroid use, fractures, infections) [24, 26, 36–39, 47, 48, 51]. ➢ Neurological examination (Lasègue's test and crossing Lasègue's test) [40].	Not recommended [24, 26, 37–40, 48, 51].
	Chronic	➢ Pain in low back > 12 weeks [28, 37–40, 43, 46] ➢ Recurrent: > 2 on an 11 point NRS for at least 24 h following a period of at least 30 days pain free [53]. ➢ Muscle tension or stiffness in lower back [36, 39]. ➢ Posterior irradiation not below the knee [46].	➢ No "red flags" (e.g. history of cancer, steroid use, fractures, infections) [36–39, 43, 48] ➢ Neurological examination (Lasègue's test and crossing Lasègue's test) [40].	Not recommended [37–40, 43, 48].
LRS		➢ Pain in low back [38, 39] < 1 month [46]. ➢ Muscle tension or stiffness or weakness in lower back [39, 55]. ➢ Posterior irradiation below the knee or anterior to the thigh [46]. ➢ Radicular pain in 1 lower limb [25, 31, 55].	➢ One or more positive neurological test indicating nerve root irritation or neurological deficit (e.g. a positive Lasègue's test at 60°) [25, 31, 38, 39, 55]. ➢ Finger-floor distance of > 25 cm [55]. ➢ Neurological signs (e.g. incontinence) [55].	Not recommended [39, 55].
SAPS		➢ Shoulder pain [7, 13, 20, 30] worsened by active elevation [7, 13]. ➢ Weakness of shoulder muscles [20, 30]. ➢ Stiffness of shoulder joint [30]. ➢ Loose or unstable shoulder [30]. ➢ Painful clicking, grinding or clunking in the shoulder [30].	➢ Positive (pain or weakness) on one or more specific tests (e.g. Neer's sign test or Painful arc test) [7, 13, 20, 30]. ➢ Retraction of tendon(s) to the glenoid rim, measured in either the coronal or axial plane, and/or ≥ 67% of the greater tuberosity exposed, measured in the sagittal plane, diagnosed either with MRI or intraoperatively [52].	Useful after 6 weeks of symptoms [13]. MRI [52]
CTS		➢ (Nocturnal) numbness of digits I, II or III [7, 22, 32, 33, 35, 49]. ➢ Pain in hand, wrist and forearm [7, 49]. ➢ Weakness/atrophy of thenar musculature	➢ Positive on provocative tests (e.g. Tinel's sign or Phalen's test) [7, 33, 35]. ➢ Nerve conduction examination of the median nerve [22, 27, 35, 49]:	NR

Working Group 3: Standardized Protocols for New Occupational Data Collection

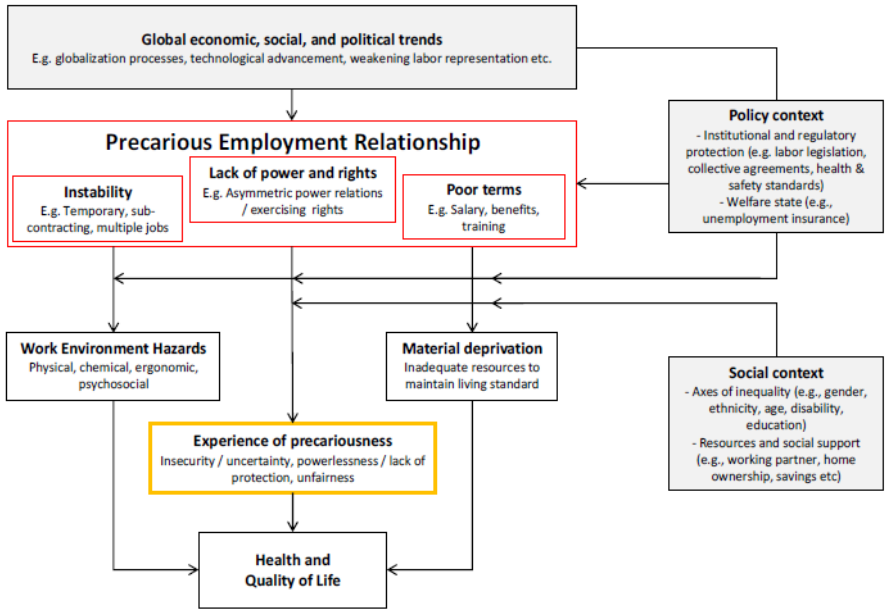
- Leader: Maria Albin
- Vice Leader: Henrik Kolstad

- Task 3.1. Healthy ageing and work participation
- Task 3.2. Working hours
- Task 3.3. Employment patterns in the young including young employed mothers
- Task 3.4. Occupational skin diseases
- Task 3.5. Work-related psychosocial determinants of mental health
- Task 3.6. Precarious work
- Task 3.7. Migrant workers

OMEGA-NET

Precarious employment in occupational health – an OMEGA-NET working group position paper

by Theo Bodin, MD, PhD,[1,2] Çiğdem Çağlayan, MD,[3] Anne Helene Garde, PhD,[4,5] Marco Gnesi, PhD,[6] Johanna Jonsson, MSc,[1] Sibel Kiran, MD, PhD,[7] Bertina Kreshpaj, MSc,[1] Taina Leinonen, PhD,[8] Ingrid S Mehlum, MD, PhD,[9] Evangelia Nena, MD, PhD,[10] Cecilia Orellana, PhD,[1] Trevor Peckham, MSc,[11] Noah Seixas, PhD,[11] Christophe Vanroelen, PhD,[12] Mireia Julià, PhD [13,14]



Working life, health and well-being of parents: a joint effort to uncover hidden treasures in European birth cohorts

by Monica Ubalde-Lopez, PhD,[1–3,*] Tina Garani-Papadatos, PhD,[4,*] Ghislaine Scelo PhD,[5,*] Maribel Casas, PhD,[1–3] Claudia Lissåker, PhD,[6] Susan Peters, PhD,[7] Ellen Aagaard Nohr, PhD,[8] Maria Albin, PhD,[6] Raquel Lucas, PhD,[9,10] Kyriaki Papantoniou, PhD,[11] Kinga Polańska, PhD,[12] Cecilia H Ramlau-Hansen, PhD,[13] Jelena Šarac, PhD,[14] Jenny Selander, PhD,[6] Helena Skröder, PhD,[6] Elena Vasileiou, MSc,[15] Manolis Kogevinas, PhD,[1–3,16] Ute Bültmann, PhD,[17] Ingrid Sivesind Mehlum, PhD,[18,19] Milena Maule, PhD [5]

REVIEW ARTICLE

BJD
British Journal of Dermatology

Global evidence on occupational sun exposure and keratinocyte cancers: a systematic review

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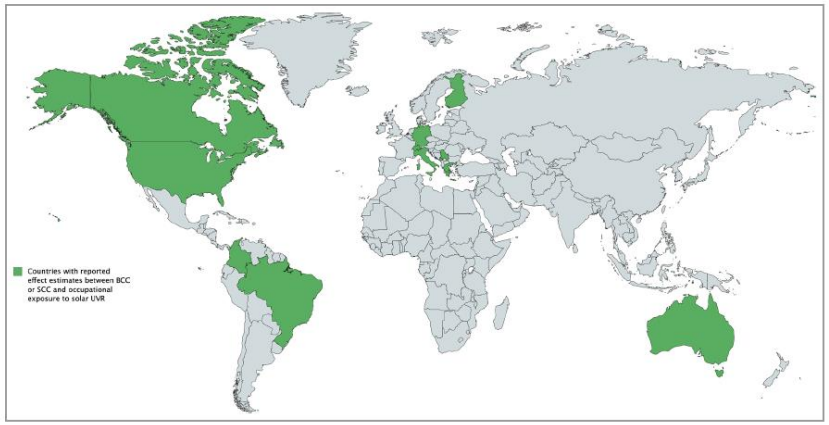
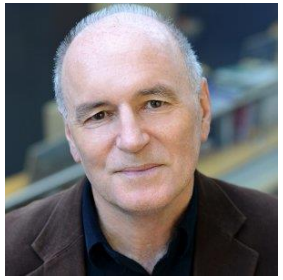


Figure 2 Countries with reported effect estimates for basal cell carcinoma (BCC) or squamous cell carcinoma (SCC) and occupational exposure to solar ultraviolet radiation (UVR).

Table 1. Selected available information related to mothers' work and socioeconomic status in 59 European birth cohorts (as reported in www.birthcohorts.net catalogue, accessed on 5 Feb 2021).

Cohort	General variables				Occupational exposures variables				
	Education	Income	Single parenthood	Employment status	Job title	Occupational exposures	Heavy lifts	Work hours	Work address
ABC	x	x				x			
ABCD	x	x	x	x	x	x	x	x	
ALSPAC	x					x	x		
BaBi	x	x	x	x	x	x	x		
BABIP	x	x	x	x	x				
Babycarecohort	x	x	x			x	x		
BAMSE	x			x	x				
BASIC	x	x	x	x					
BIB	x	x	x			x			
CELSPAC: TNG	x	x	x	x	x	x	x	x	x
CHOP	x		x	x	x			x	
COLLAGE	x	x				x			
Co.N.ER						x			
CRIBS	x	x	x	x	x	x	x		x
Czech Early Childhood Health						x			
DNBC	x					x	x		
ECLIPSES	x	x	x	x	x				
EDEN	x	x	x	x		x			
ELFE	x					x	x		
ELSPAC	x			x		x	x		
FCOU	x					x	x		
FLEHS 1 RefNb	x	x		x	x	x			
FLEHS 2 Ref Nb	x	x	x	x	x	x			

Working Group 4: Science Communications, Dissemination, and Training



- Leader: Alex Burdorf
- Vice Leader: Neil Pearce

- Task 4.1. Project logo and website
- Task 4.2. Dissemination strategy and materials, including social media platforms
- Task 4.3. Stakeholder engagement
- Task 4.4. Training schools and conference grants

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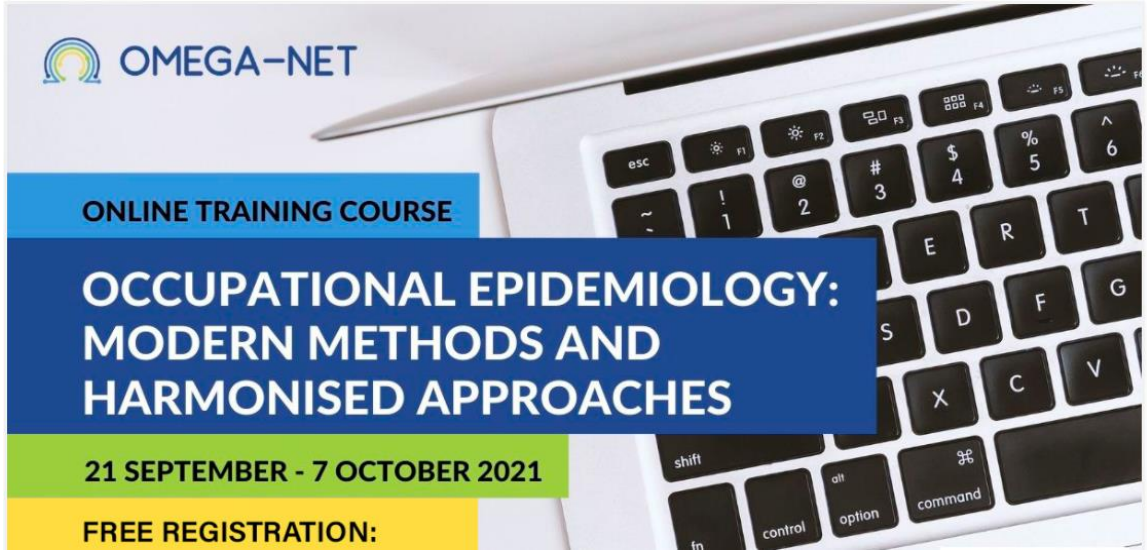
Training courses



PRE-COURSE ON:
MODERN METHODS IN OCCUPATIONAL EPIDEMIOLOGY

A training school co-ordinated by COST Action CA16216 "Network on the Coordination and Harmonisation of European Occupational Cohorts"

11-15 June 2018

Training Course On Quantitative Exposure Assessment In Occupational And Environmental Epidemiology

DATE: 16-21 June 2019
VENUE: Sønderborg, Denmark

COVID-19 Task Group

- Leader: Lode Godderis

- SubTask 1. COVID-19 Questionnaires
- SubTask 2. COVID-19 JEM
- SubTask 3. COVID-19 as Occupational Disease

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COVID-19 questionnaire resource

Vivi Schlünssen, Jean-Baptist du Prel, Damien McElvenny, Martie van Tongeren, and the OMEGA-NET/EPHOR COVID-19 working groups

Work-related information on SARS-CoV-2 and COVID-19 to be collected in a consistent way

Intention is for multi-national use

Freely availably, but hopefully, source will be acknowledged

Long/short versions of questionnaires

A resource with further questions covering a range of domains

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PPE	
Do you use any personal protective equipment during your work?	
a. Respiratory protective equipment	ALL DAY/MOST OF THE DAY/OCCASIONALLY
b. Face fit tested?	YES/NO/DON'T KNOW
c. Face covering (home made or surgical mask)	ALL DAY/MOST OF THE DAY/OCCASIONALLY
d. Gloves	ALL DAY/MOST OF THE DAY/OCCASIONALLY
e. Visor	ALL DAY/MOST OF THE DAY/OCCASIONALLY
f. Other, state what _____	ALL DAY/MOST OF THE DAY/OCCASIONALLY
Health effects	
Has the COVID-19 pandemic directly or indirectly worsened an existing disease/condition (YES/NO)	
Has the COVID-19 pandemic directly or indirectly initiated negative health effects? (YES/NO)	
Work-related effects	
In what way has your hours of work changed as a result of COVID-19? Increased a lot, Increased a little, No change, Decreased a little, Decreased a lot, Stopped Working	
Have you lost your job as a result of COVID-19? (YES/NO)	

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Financial effects
How would you rate the changes of your personal financial situation before and after the beginning of the coronavirus crisis? (SIGNIFICANT WORSENING/SOMEWHAT WORSENING/SOMEWHAT IMPROVING/SIGNIFICANT IMPROVEMENT/NOT APPLICABLE)
Work-based risk factors
Are you able to implement physical distancing (> 1/ 1.5 / 2 m) with your colleagues at all the time? (YES/NO)
Are you able to maintain physical distancing during commuting (above 1-2 m) (YES/NO)
How often does your current job require that you been potentially exposued to diseases or infections? (NEVER, SOMETIMES, OFTEN, FREQUENTLY, ALL OF THE TIME)
Has your job changed since the start of the pandemic? (YES/NO). What is your new job?
Is your main place of work, one of the following (YES/NO) (home, outdoor public place, outdoors restricted, hospital, public transport vehicles, public transport building and other public building with high throughput of public, public buildings with low throughput, shops and retail (public facing), education, non-public offices/manufacturing, non-public transport).
Which of the following control measures are in place where you work (YES/NO) (Testing of staff/patients/public, Social distancing, Ventilation, Barriers partial or complete, PPE, intensified cleaning)
What is the estimated number employed at the workplace in your current job?

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COVID-19 Job-Exposure Matrix

Thank you for filling the previous form. Now you can download the COVID-19 Job-Exposure Matrix by clicking on the link below

COVID-19 Job-Exposure Matrix

1 file(s) 258.50 KB

DOWNLOAD

Scientific Publication

Oude Hengel KM, Burdorf A, Pronk A, Schlünssen V, Stokholm ZA, Kolstad HA, van Veldhoven K, Basinas I, van Tongeren M, Peters S. **Exposure to a SARS-CoV-2 infection at work: development of an international job exposure matrix (COVID-19-JEM)**. Scand J Work Environ Health 2022;48(1):61-70. doi: 10.5271/sjweh.3998.

	A	B	C	D	E	F	G	H	I	J	K
1	ISCO-08	Job title	Sector	Number	Nature of contacts	Contaminated workspaces	Location	Social distance	Face Covering	Income insecurity	Migrants
2	0110	Commissioned armed forces officers		1	1	1	2	1	1	0	0
3	0210	Non-commissioned armed forces officers		2	1	1	2	2	1	0	0
4	0310	Armed forces occupations, other ranks		1	1	1	3	2	1	0	0
5	1111	Legislators		1	1	1	3	1	0	0	0
6	1112	Senior government officials		1	1	1	3	1	0	0	0
7	1113	Traditional chiefs and heads of village		1	1	1	3	1	0	0	0
8	1114	Senior officials of special-interest organizations		1	1	1	3	1	0	0	0
9	1120	Managing directors and chief executives		1	1	1	3	1	0	0	0
10	1211	Finance managers		0	0	0	0	0	0	0	0
11	1212	Human resource managers		1	1	1	3	1	0	0	0
12	1213	Policy and planning managers		0	0	0	0	0	0	0	0
13	1219	Business services and administration managers not elsewhere classif		1	1	1	3	1	0	0	0
14	1221	Sales and marketing managers		0	0	0	0	0	0	0	0
15	1222	Advertising and public relations managers		0	0	0	0	0	0	0	0
16	1223	Research and development managers		0	0	0	0	0	0	0	0
17	1311	Agricultural and forestry production managers		1	1	1	3	1	2	0	0
18	1312	Aquaculture and fisheries production managers		1	1	1	3	1	2	0	0
19	1321	Manufacturing managers		1	1	1	3	1	2	0	0
20	1322	Mining managers		1	1	1	3	1	2	0	0
21	1323	Construction managers		1	1	1	3	1	2	0	0
22	1324	Supply, distribution and related managers		1	1	1	3	1	2	0	0
23	1330	Information and communications technology service managers		0	0	0	0	0	0	0	0
24	1341	Child care services managers		1	1	1	3	2	2	0	0
25	1342	Health services managers		1	1	1	3	1	1	0	0
26	1343	Aged care services managers		1	1	1	3	1	1	0	0
27	1344	Social welfare managers		1	1	1	3	1	1	0	0
28	1345	Education managers		1	1	1	3	1	1	0	0
29	1346	Financial and insurance services branch managers		1	1	1	3	1	0	0	0
30	1349	Professional services managers not elsewhere classified		1	1	1	3	1	0	0	0
31	1411	Hotel managers		1	1	1	3	1	2	1	0
32	1412	Restaurant managers		1	1	1	3	1	2	1	1
33	1420	Retail and wholesale trade managers		1	1	1	3	1	2	1	1
34	1431	Sports, recreation and cultural centre managers		1	1	1	3	1	2	1	0
35	1439	Services managers not elsewhere classified		1	1	1	3	1	2	1	0
36	2111	Physicists and astronomers		1	1	1	3	1	2	0	1
37	2112	Meteorologists		0	0	0	0	0	0	0	1
38	2113	Chemists		1	1	1	3	1	2	0	1

S1.1 Denmark | S1.2 the Netherlands | S1.3 United Kingdom

Listo

Key Points

- OMEGA-NET is a network that seeks to optimize the use of occupational, industrial, and population cohorts at the European level

- Facilitate work on harmonisation of occupational exposure and health outcome information and new protocols for data collection

- Many opportunities for participation

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