



COST Action CA18218  
**European Burden of Disease Network**



*Technical platform to integrate and strengthen capacity in burden of disease assessment across Europe and beyond*

**[www.burden-eu.net](http://www.burden-eu.net)**



A photograph of a laptop on a wooden desk. The laptop screen shows a video conference with several participants in a grid layout. In the foreground, a green ceramic mug is partially visible. A blue horizontal bar is overlaid across the middle of the image, containing the text "357 members" in white.

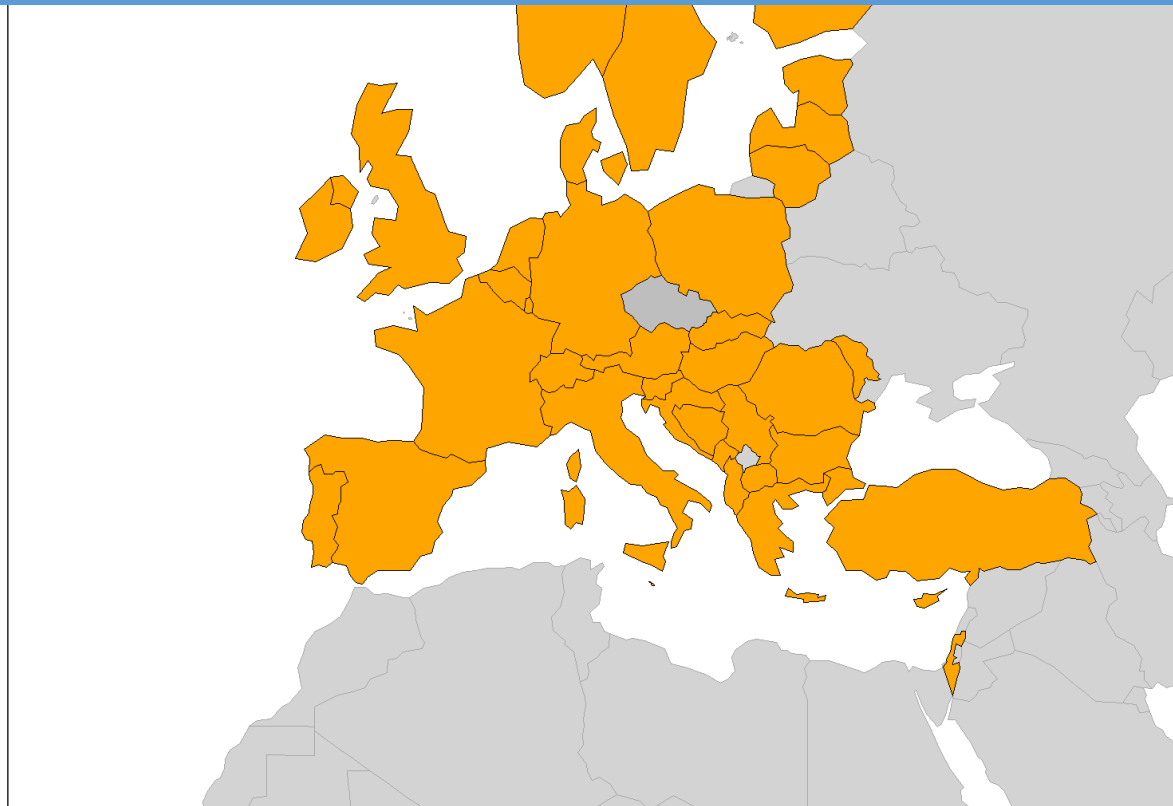
**357 members**

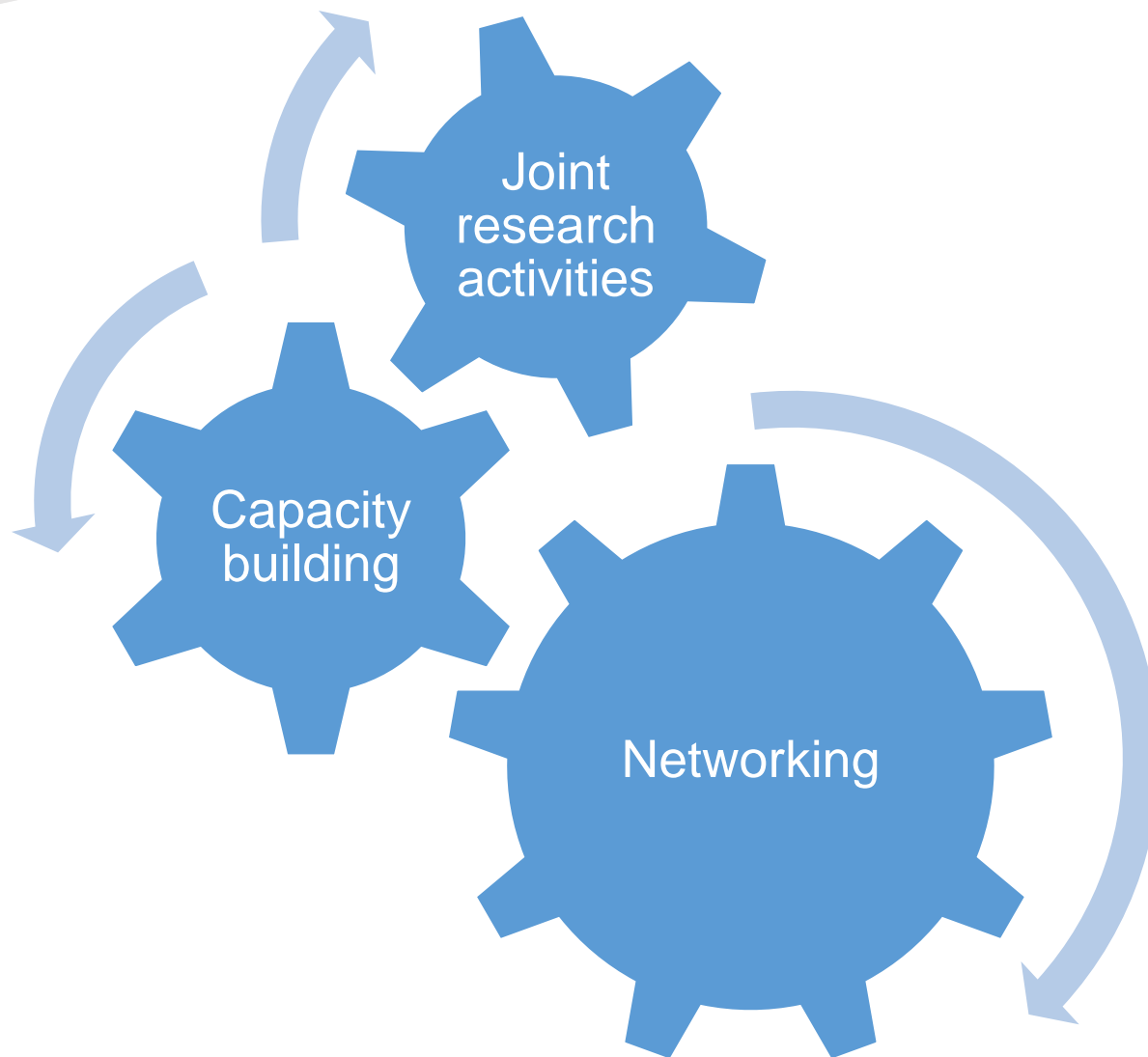
# 38+20 countries

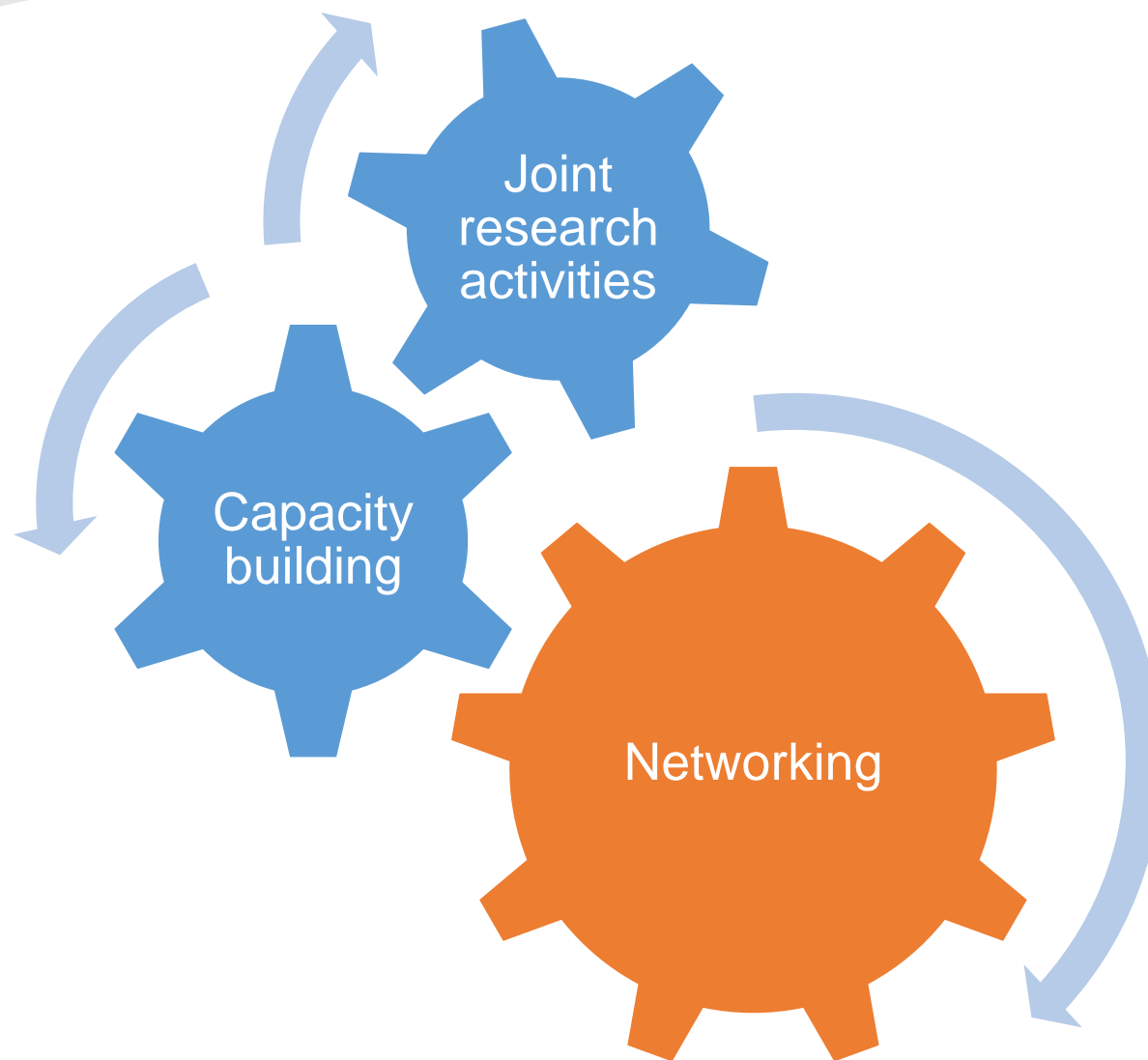


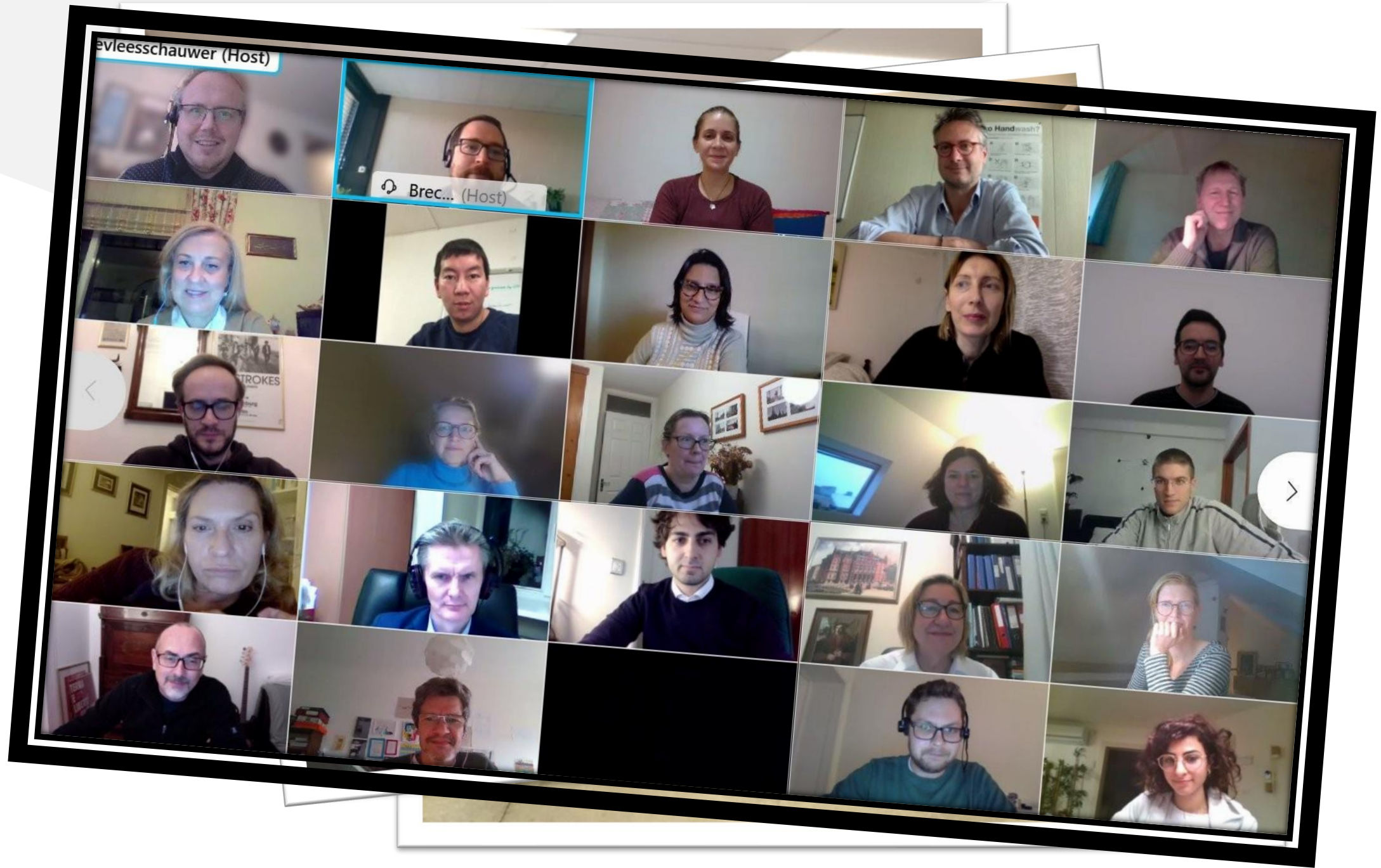
World Health  
Organization

European  
**Observatory**  
on Health Systems and Policies  
a partnership hosted by WHO









evleeschauwer (Host)

Brec... (Host)



Infographics as a tool for knowledge translation



National Institute for Public Health and the Environment  
Ministry of Health, Welfare and Sport

Later bekijk... Delen


Health, risk factors and inequalities in the EU: Insights from the Global Burden of Disease study



**HEALTH, RISK FACTORS AND INEQUALITIES IN THE EU: INSIGHTS FROM THE GLOBAL BURDEN OF DISEASE STUDY**

14th European Public Health Conference • 10 November 2021


Burden of disease of COVID-19: strengthening the collaboration for national studies



**WORKSHOP: BURDEN OF DISEASE OF COVID-19: STRENGTHENING THE COLLABORATION FOR NATIONAL STUDIES**

European Public Health Conference, 10-12<sup>th</sup> November 2021

Knowledge Translation and Burden of Disease, from theory to practice



**KNOWLEDGE TRANSLATION: FROM THEORY TO PRACTICE**


Dr Henk Hilderink and Dr Elena Pallari  
EPH conference 2021

ephconference.backend.get-eureka.com is sharing your screen



cost is supported by the EU Framework programme Horizon 2020

Methodological choices in burden of disease studies: a literature review of European studies



**METHODOLOGICAL CHOICES IN BURDEN OF DISEASE STUDIES: SYSTEMATIC LITERATURE REVIEW OF EUROPEAN STUDIES**

14th European Public Health Conference • 11 November 2021



cost is supported by the EU Framework programme Horizon 2020

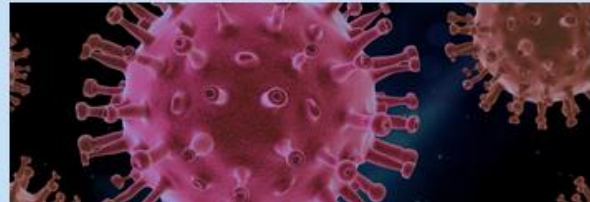
**The burden-eu COST Action wants to put its members in the spotlight!** Spotlights are short (500-1000 words) blogposts where network members present their work in a personal and vulgarizing way. The spotlights also describe how the presented work benefited from the COST Action.

Do you have a recent publication or new project related to burden of disease? Please let us know via [info@burden-eu.net](mailto:info@burden-eu.net), and we will be happy to put you in the spotlight!

Santé Publique France - National burden of disease study for France



Alexander Rommel - BoCO-19: Towards a harmonization of population health metrics for the surveillance of dynamic outbreaks



Lea Sletting Jakobsen - Impact of dairy consumption in the Danish population



Sarah Cuschieri - Experiences of the network from Malta



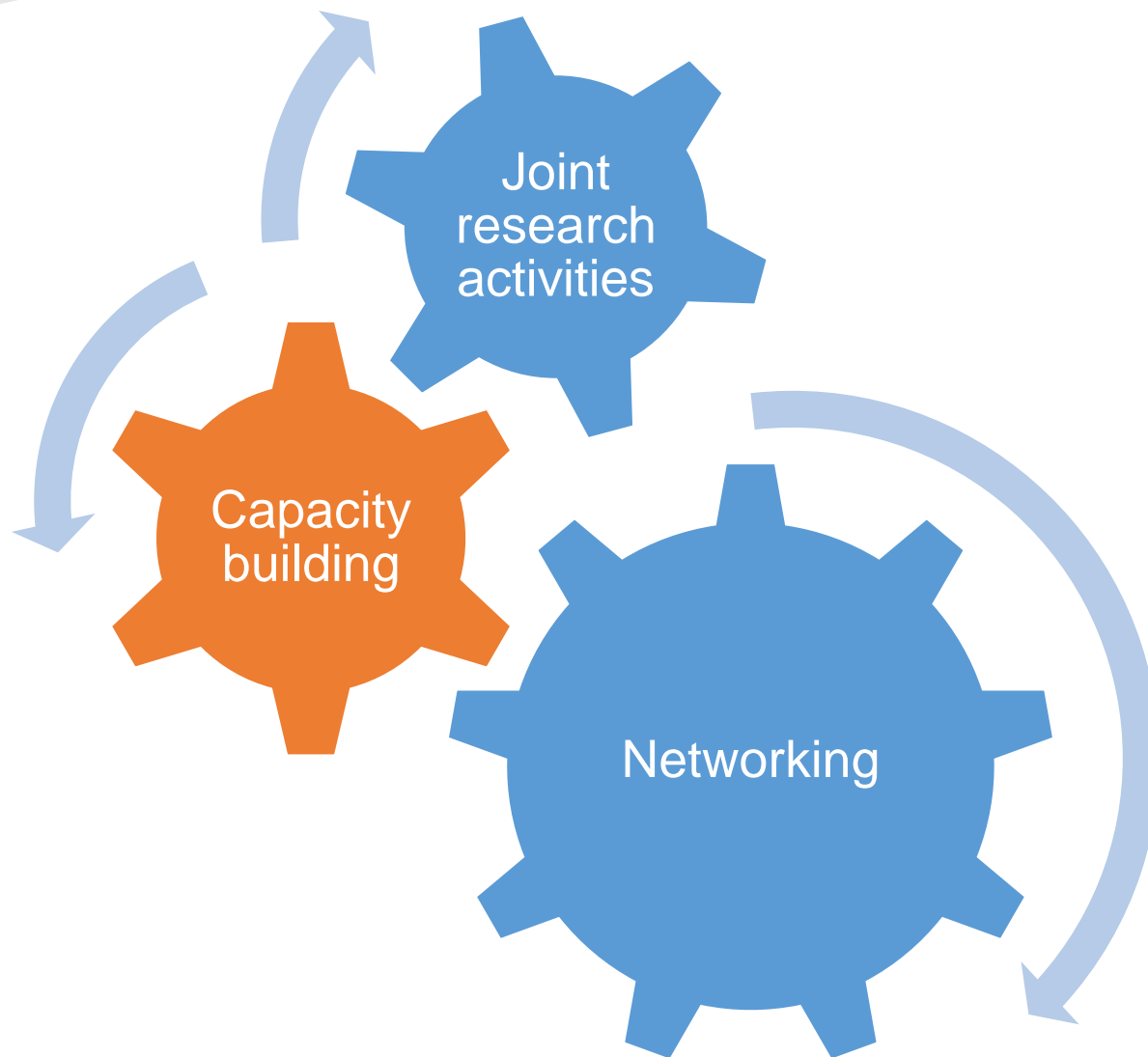
Aline Anton - Estimating headache prevalence and severity in Germany



Zubair Kabir - Development of a Global Burden of Disease-Frailty Index







<https://www.burden-eu.net/outputs/covid-19>

## COVID-19

COVID-19 has affected many countries in Europe and beyond. There is currently a growing interest to quantify the disease burden of COVID-19, measure its population health impact and compare it to other diseases. On this page, we compile burden of disease resources specifically for

### Burden of COVID-19 Task Force

The Burden of COVID-19 Task Force brings together members who are conducting or interested in launching national studies to estimate the burden of COVID-19. The TF meets approximately every six weeks to discuss technical aspects of COVID-19 burden calculation.

More information about the Task Force is available [here](#).

### Burden of COVID-19 calculation protocol

The burden-eu Core Group has prepared a protocol to provide guidance for anyone planning to assess the burden of disease of COVID-19 in terms of DALYs. It focuses on the direct health impact of the disease, and describes the data requirements, the methods, and considerations for implementation. It also aims to foster harmonization of methodologies for estimating the burden of disease of COVID-19 across countries.

You can download the protocol [here](#).

### Burden of COVID-19 webinars

On Friday 20 November 2020, our COST Action has organized a webinar on quantifying COVID-19 disease burden. You can replay the presentations [here](#).

### Burden of COVID-19 publications

DALY calculation methods for COVID-19

Wyper GM, Assunção RM, Colzani E, Grant I, Haagsma JA, Lagerweij G, Von der Lippe E, McDonald SA, Pires SM, Porst M, Speybroeck N, Devleeschauwer B.

**Burden of disease methods: a guide to calculate COVID-19 disability-adjusted life years.** *Int J Public Health.* 2021;66:619011. doi: [10.3389/ijph.2021.619011](https://doi.org/10.3389/ijph.2021.619011)



# Estimating the direct Covid-19 disability-adjusted life years impact on the **Malta** population for the first full year



Sarah Cuschieri<sup>1\*</sup>, Neville Calleja<sup>2,3</sup>, Brecht Devleeschauwer<sup>4,5</sup> and Grant M. A. Wyper<sup>6</sup>

## **Measuring the direct population impact of COVID-19 in **Scotland**, 2020: estimating disability-adjusted life years (DALYs) during the first full calendar year**

Grant MA Wyper<sup>1\*</sup>, Eilidh Fletcher<sup>2</sup>, Ian Grant<sup>2</sup>, Gerry McCartney<sup>1</sup>, Colin Fischbacher<sup>3</sup>, Oliver Harding<sup>4</sup>, Hannah Jones<sup>1</sup>, Maria Teresa de Haro Moro<sup>2</sup>, Niko Speybroeck<sup>5</sup>, Brecht Devleeschauwer<sup>6,7</sup>, Diane L Stockton<sup>1</sup>

## **The estimated disease burden of acute COVID-19 in the **Netherlands** in 2020, in disability-adjusted life-years**

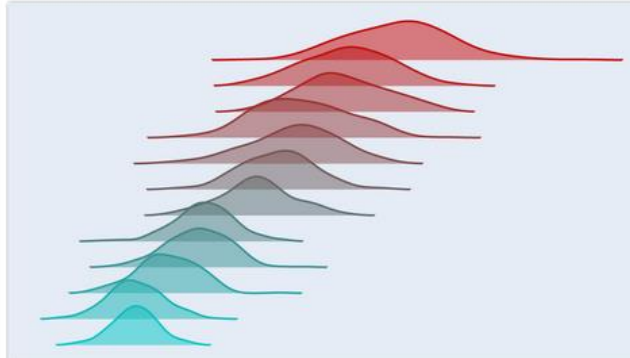
Scott A. McDonald<sup>1</sup>, Giske R. Lagerweij<sup>1</sup>, Pieter de Boer<sup>1</sup>, Hester E. de Melker<sup>1</sup>, Roan Pijnacker<sup>1</sup>, Lapo Mughini Gras<sup>1</sup>, Mirjam E. Kretzschmar<sup>1,2</sup>, Gerco den Hartog<sup>1</sup>, Arianne B. van Gageldonk-Lafeber<sup>1</sup>, RIVM COVID-19 surveillance and epidemiology team<sup>1</sup>, Susan van den Hof<sup>1</sup>, Jacco Wallinga<sup>1,3</sup>



### [Webinar] Measuring the burden of rare diseases

Tuesday 14 September 2021, 9h-10h30 CET

Read more:



### [Webinar] Forecasting the Global Burden of Disease Study

Tuesday 29 June 2021, 16h-17h CET

Read more:



### [Webinar] Burden of disease assessment for COVID-19: initial insights and future perspectives

Friday 21 May 2021, 14h-15h CET

Read more:

[www.burden-eu.net/webinars](http://www.burden-eu.net/webinars)



### [Webinar] Activities and achievements of the Italian GBD Initiative

Thursday 29 April 2021, 13h-14h CET

Read more:



### [Webinar] Elicitation and practical use of disability weights for quantifying years lived with disability

Thursday 14 January 2021, 13h-14h CET

Read more:

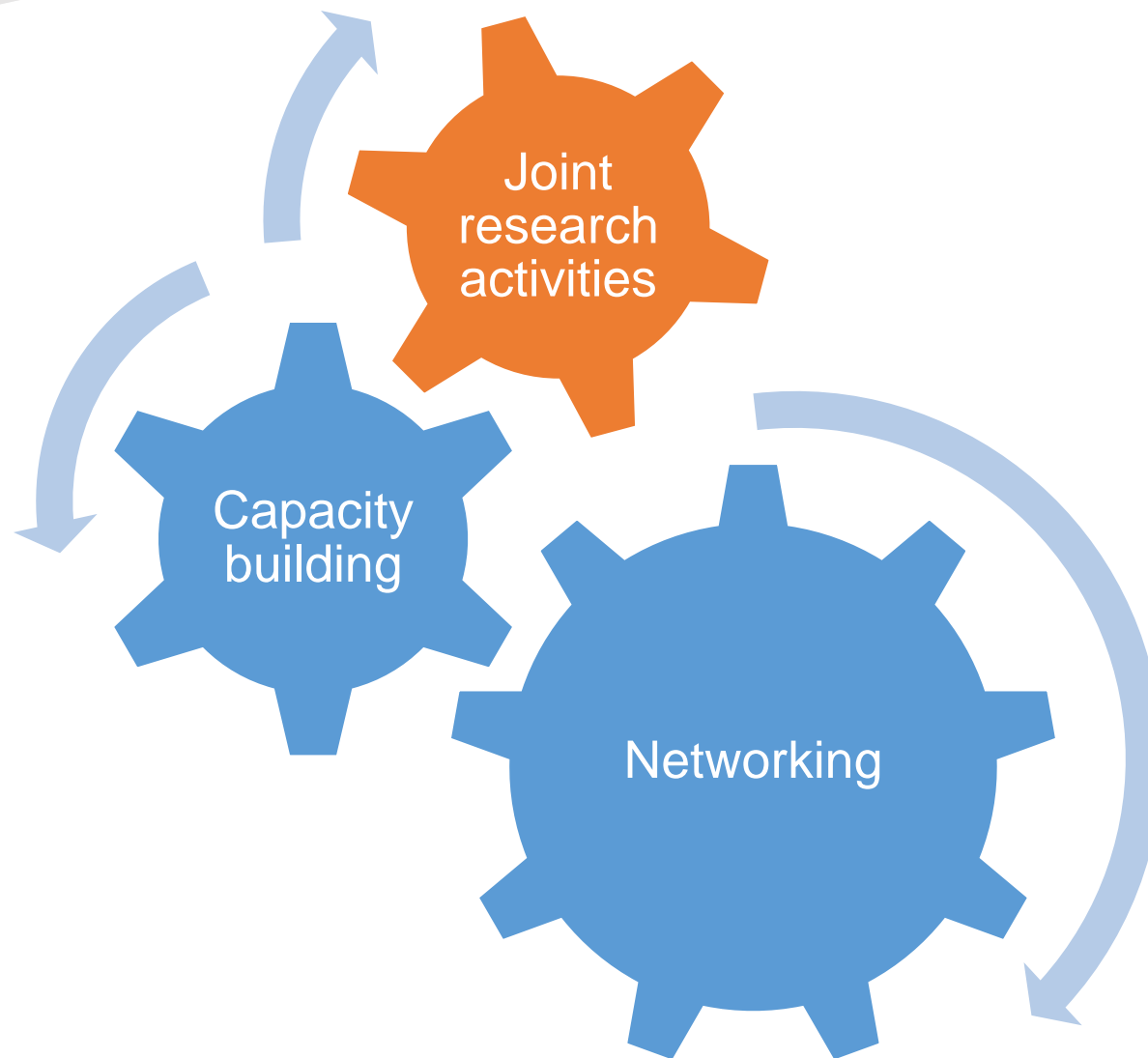


### [Webinar] Quantifying COVID-19 disease burden

Friday 20 November 2020, 11h-12h CET

Read more:







### Measuring disability-adjusted life years (DALYs) due to low back pain in Malta

Cuschieri S, Wyper GMA, Calleja N, Gorasso V, Devleesschauwer B

*Arch Public Health.* 2020;78:68



### Recommendations to plan a national burden of disease study

Haneef R, Schmidt J, Gallay A, Devleesschauwer B, Grant I, Rommel A, Wyper GMA, van Oyen H, Hilderink H, Ziese T, Newton J

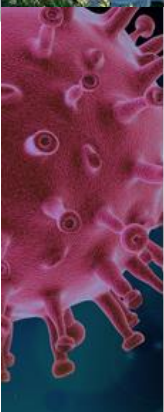
*Arch Public Health.* 2021;79:126



### Burden of non-communicable diseases in Cyprus, 1990–2017: findings from the Global Burden of Disease 2017 study

Charalampous P, Pallari E, Tyrovolas S, Middleton N, Economou M, Devleesschauwer B, Haagsma JA

*Arch Public Health.* 2021;79:138



### Population vulnerability to COVID-19 in Europe: a burden of disease analysis

Wyper GM, Assunção RM, Cuschieri S, Devleesschauwer B, Fletcher E, Haagsma JA, Hilderink H, Idavain J, Lesnik T, Von der Lippe E, Majdan M, Santric-Milicevic M, Pallari E, Peñalvo JL, Pires SM, Plass D, Santos JV, Stockton DL, Thomsen ST, Grant I

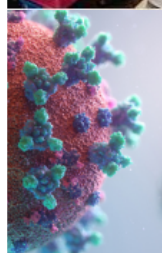
*Arch Public Health.* 2020;78:47



### Burden of foodborne diseases: think global, act local

Pires SM, Desta BN, Mughini-Gras L, Mmbaga BT, Fayemi OE, Salvador EM, Gobena T, Majowicz SE, Hald TM, Hoejskov PS, Minato Y, Devleesschauwer B

*Curr Opin Food Sci.* 2021;39:152-159



### Estimating the direct Covid-19 disability-adjusted life years impact on the Malta population for the first full year

Cuschieri S, Calleja N, Devleesschauwer B, Wyper GMA

*BMC Public Health.* 2021;;21:1827



### Health expectancies in the European Union: same concept, different methods, different results

Santos JV, Viana J, Devleesschauwer B, Haagsma J, Costa-Santos C, Ricciardi W, Freitas A

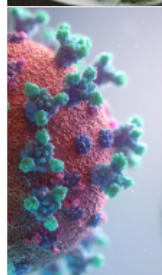
*J Epidemiol Community Health.* 2021;75:764-771



### Risk factors and their contribution to population health in the European Union (EU-28) countries in 2007 and 2017

Santos JV, Gorasso V, Souza J, Wyper GMA, Grant I, Pinheiro V, Viana J, Ricciardi W, Haagsma JA, Devleesschauwer B, Plass D, Freitas A

*Eur J Public Health.* 2021; in press



### Valuing the years of life lost due to COVID-19: the differences and pitfalls.

Devleesschauwer B, McDonald S, Speybroeck N, Wyper GMA

*Int J Public Health.* 2020;65:719-720



### Reflections on key methodological decisions in national burden of disease assessments

von der Lippe E, Devleesschauwer B, Gourley M, Haagsma J, Hilderink H, Porst M, Wengler A, Wyper G, Grant I

*Arch Public Health.* 2020;78:137



### The increasing significance of disease severity in a burden of disease framework

Wyper G, Assunção R, Fletcher E, Gourley M, Grant I, Haagsma J, Hilderink H, Idavain J, Lesnik T, von der Lippe E, Majdan M, McCartney G, Pallari E, Pires S, Plass D, Porst M, Santos J, Santric-Milicevic M, de Haro Moro MT, Stockton D, Devleesschauwer B

*Scand J Public Health.* 2021; in press



### Burden of disease methods: a guide to calculate COVID-19 disability-adjusted life years

Wyper GMA, Assunção RMA, Colzani E, Grant I, Haagsma JA, Lagerweij G, Von der Lippe E, McDonald SA, Pires SM, Porst M, Speybroeck N, Devleesschauwer B

*Int J Public Health.* 2021;66:619011



### Conducting national burden of disease studies in small countries in Europe– a feasible challenge?

Cuschieri S, Pallari E, Terzic N, Alkerwi A, Sigurvinsdottir R, Sigfusdottir ID, Devleesschauwer B

*Arch Public Health.* 2021;79:73



### European burden of disease network: strengthening the collaboration

Devleesschauwer B

*Eur J Public Health.* 2020;30:2-3



# Our experience

- Unique opportunity for networking and capacity building
  - Network still growing !
- Platform for preparing new project proposals
  
- Administrative burden
- How to keep large network involved?
- COVID has a big impact, but we adapted via new online tools
- Need careful reflection on options for sustainability



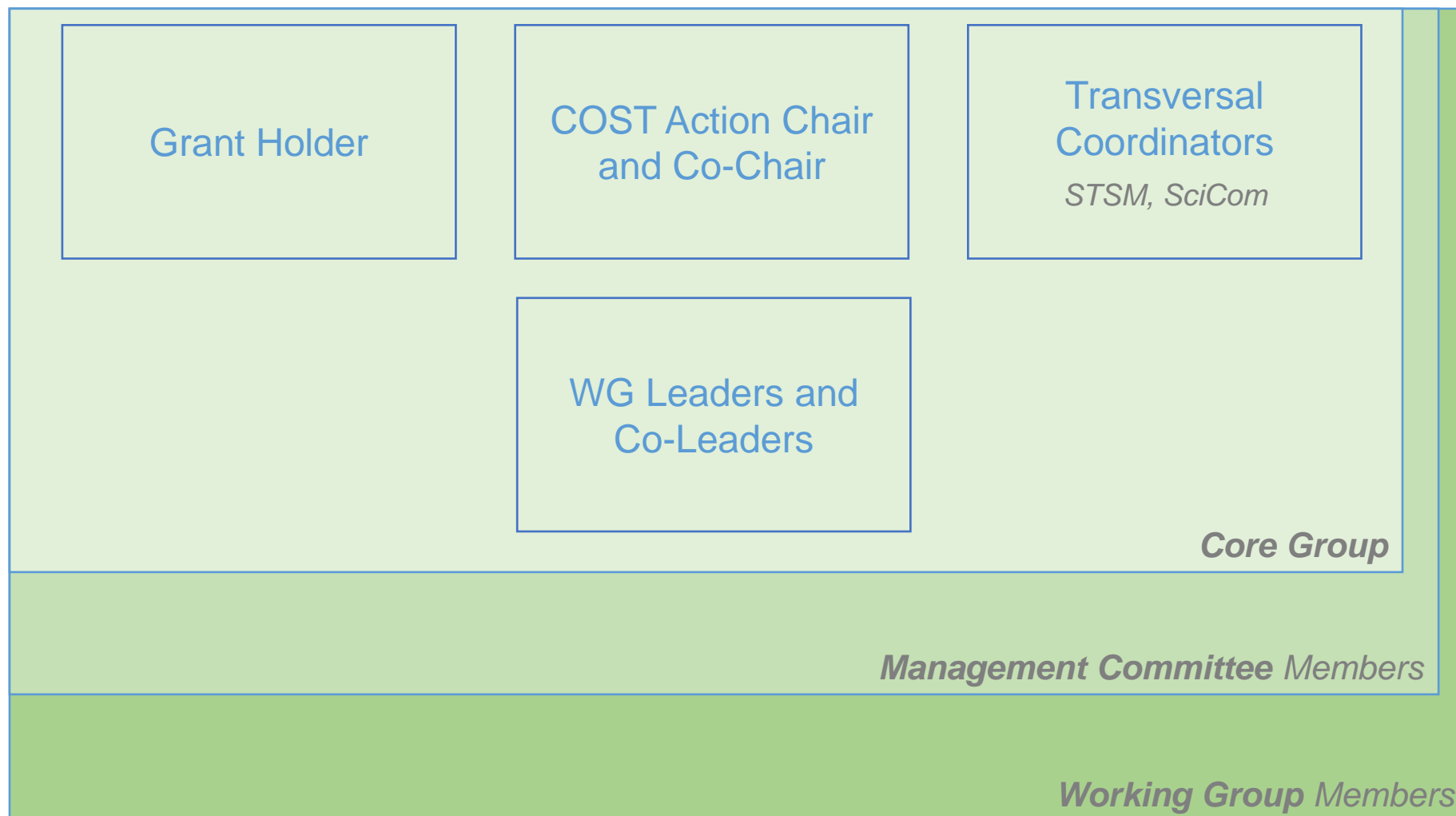
# Tips and tricks

On getting your proposal accepted  
(and ensuring a smooth implementation of the Action)

# Tips and tricks

1. Be part of a COST Action
2. Have a real need for a network
3. Remain anonymous
4. Implement COST tools & policies
5. Write the proposal for the reviewers
6. Define realistic objectives and deliverables
7. Know your WG leaders

# Be part of a COST Action



# Have a real need for network

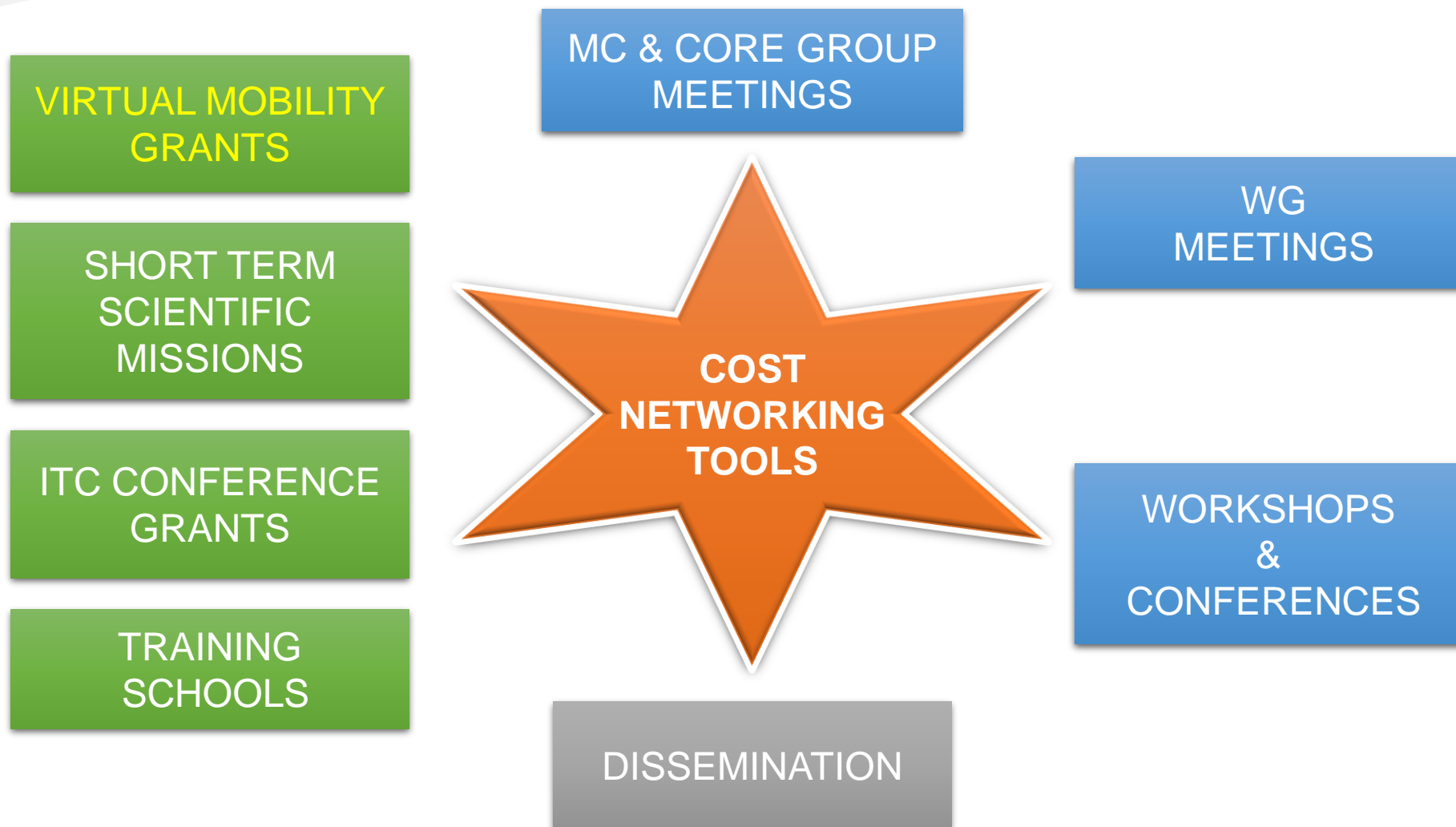
The screenshot displays the ScotPHO website interface. At the top left is the ScotPHO logo with the tagline "Public Health Information for Scotland". To the right is the text "The Scottish Public Health Observatory" and its mission statement: "Working to improve Scotland's health and reduce health inequalities". A search bar is located in the top right corner. Below the header is a navigation menu with categories like Home, Behaviour, Clinical Risk Factors, Life Circumstances, Population Groups, Comparative Health, Population Dynamics, Health, Wellbeing and Disease, Publications, and About Us. The breadcrumb trail reads: Home > Comparative Health > Burden of Disease > Technical workshop.

The main content area is titled "Burden of Disease technical workshop 2016". It includes a sidebar menu with options: Overview, SBOD results 2016, SBOD data 2016, SBOD local 2016, Archive, and Technical workshop (which is highlighted). The main text describes a workshop held in Edinburgh on September 15th and 16th, 2016, with participants from England, The Netherlands, Norway, Germany, Belgium, and Switzerland. It provides links to a delegate list and a programme. The workshop content is organized into six numbered sections:

- Summary of burden of disease work programme in each represented country (Scotland [1MB], Norway [4MB], The Netherlands [2MB], England [2MB], Belgium [1MB], Germany [8MB])
- International collaborative work (WHO [1MB], GATHER guidelines [2MB], Nordic countries study [3MB])  
Professor John Newton also highlighted the new GBD European Network being launched the following week.
- Presentational approaches and impact (discussion - no slides)
- Health Economics (Scotland [1MB])
- Projections (Norway [2MB], WHO [1MB], The Netherlands [3MB])
- Risk factors (Scotland [2MB])

**Remain anonymous**

# Implement COST tools




# Implement COST policies



# Write for the reviewers

## CA18218 - European Burden of Disease Network (burden-eu)

 Downloads

[Home](#) > [Browse Actions](#) > European Burden of Disease Network (burden-eu)

**Description**

Management Committee

Main Contacts and Leadership


Working Groups and Membership


### Description


What are the most relevant diseases in a country? Which risk factors are the strongest contributors to disease and death? How is the impact of different diseases evolving over time, and how does it compare between countries and within subnational units? As the need for prioritising the use of available resources constantly increases, a timely, sound and comprehensive answer to these fundamental questions is more than ever needed to inform public health decision making. Driven by the impact of the Global Burden of Disease study, several researchers and national and international health institutes have adopted the burden of disease approach to address these questions.

The complexity of the burden of disease approach however resulted in major disparities in research capacity across Europe. The burden-eu COST Action will address current challenges by 1) stimulating interaction between existing efforts, 2) supporting technical capacity building at country level,

#### Action Details

 MoU - 035/19

 CSO Approval date - 04/06/2019

 Start date - 28/10/2019

 End date - 27/10/2023

 <https://www.burden-eu.net/>



# Define realistic objectives

## Research Coordination

- To bring together experts and expertise across different domains, transforming the currently scattered burden of disease landscape into one transnational team.
- To compare and harmonize methods and approaches for burden of disease assessment.
- To identify critical knowledge and data gaps, and set up studies for which international coordination is needed.
- To serve as an advocacy group for the burden of disease approach in Europe.

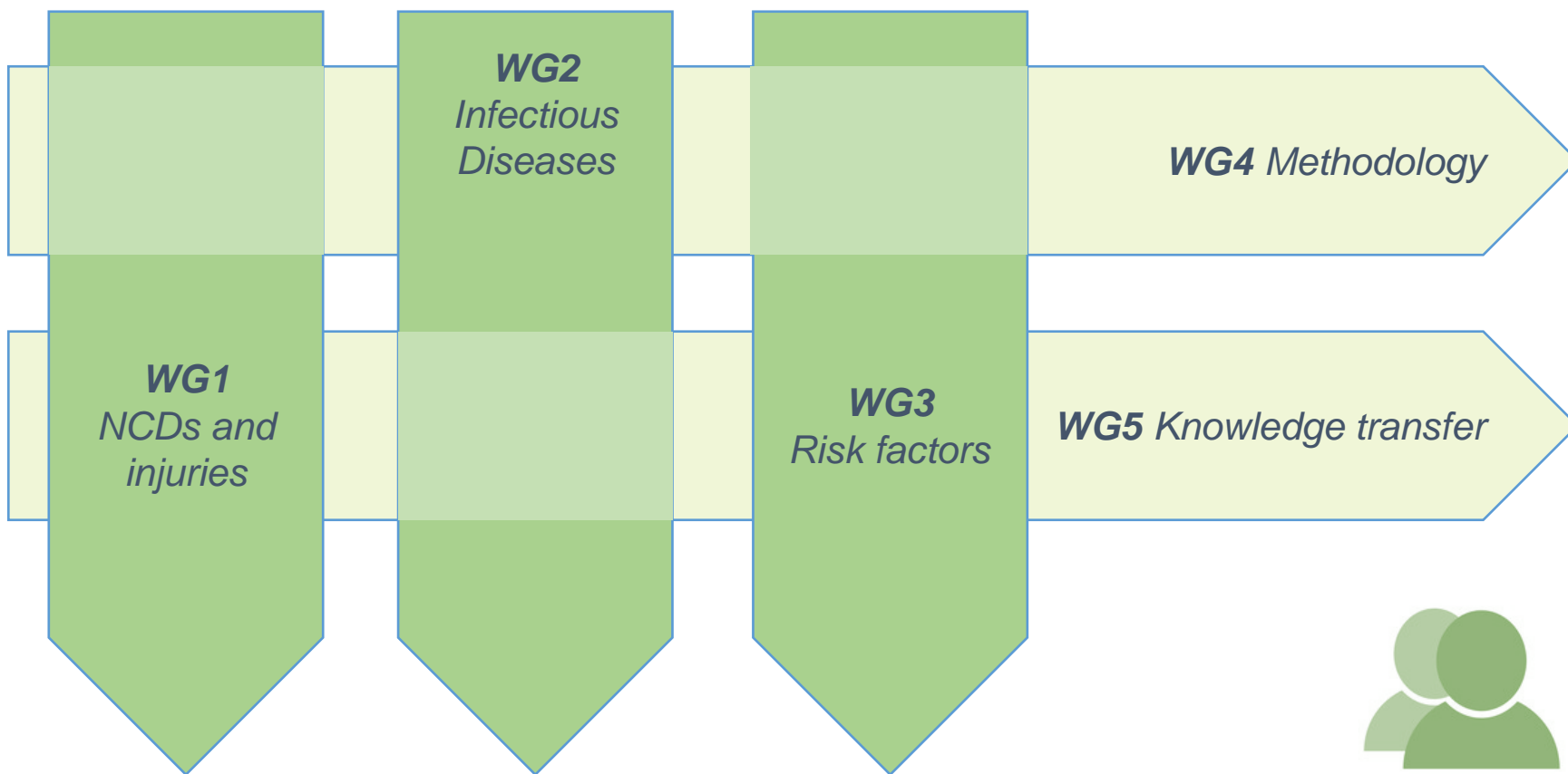
## Capacity Building

- To build and increase capacity in burden of disease assessment across Europe. The Action will have an explicit focus on the involvement of specific target groups, including Early Career Investigators, the under-represented gender, and teams and countries with less capacity in the field of burden of disease.
- To serve as a technical platform where knowledge and expertise can be shared among established and emerging researchers.
- To promote an interdisciplinary approach that integrates knowledge translation in the classical burden of

# Define realistic deliverables

#	Deliverable	Deadline
1	Development of the Action's <b>website</b>	M6
2	Development of <b>communication and dissemination strategy</b>	M6
3	Development of <b>checklist</b> for burden of disease studies	M15
4	Development of burden of disease <b>training material</b>	M21
5	Development of <b>national burden of disease roadmap</b>	M36
6	<b>Identification and involvement</b> of BOD researchers	M48
7	Compilation of <b>burden of disease studies</b>	M48
8	Compilation of <b>knowledge translation</b> good practices	M48
9	Development of <b>joint BOD research agenda</b>	M48

# Know your WG leaders



**STSM/ITC-CG coordinator**  
**Science Communication Manager**



# COST Action CA18218

## European Burden of Disease Network



[www.burden-eu.net](http://www.burden-eu.net)

