

# Third meeting of the European Burden of Disease Network (EBoDN)

Berlin, Germany  
22–23 August 2018



# Third meeting of the European Burden of Disease Network

## Meeting report

**Berlin, Germany  
22–23 August 2018**

## ABSTRACT

The third meeting of the European Burden of Disease Network was convened by the WHO Regional Office for Europe on 22–23 August 2018 in Berlin, Germany, and hosted by the Robert Koch Institute. A range of international burden of disease (BoD) experts from the WHO European Region and the Institute for Health Metrics and Evaluation (IHME) attended the meeting. The purpose of the third meeting was to enhance collaboration further; to discuss and finalize the BoD manual; and to facilitate effective knowledge exchange between experts in the field. Considerable progress has been made since the second meeting: a new memorandum of understanding between WHO and IHME has been signed; a further draft of the national BoD manual has been produced; several countries have published subnational BoD estimates. However, participants also described various challenges facing those undertaking BoD studies, including resources, engagement from stakeholders and access to high-quality data. The next steps will be to enhance knowledge transfer between countries, to expand the Network and to finalize the national BoD manual. A workplan for the following year was agreed to realize these aims.

Address requests about publications of the WHO Regional Office for Europe to:

Publications

WHO Regional Office for Europe

UN City, Marmorvej 51

DK-2100 Copenhagen Ø, Denmark

Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office website (<http://www.euro.who.int/pubrequest>).

© World Health Organization 2019

All rights reserved. The Regional Office for Europe of the World Health Organization welcomes requests for permission to reproduce or translate its publications, in part or in full.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. The views expressed by authors, editors, or expert groups do not necessarily represent the decisions or the stated policy of the World Health Organization.

## Contents

Abbreviations .....	iv
Executive summary .....	v
Introduction .....	1
Objectives of the meeting.....	1
Recent developments in the WHO European Region .....	2
Update by participants on recent national developments .....	2
Update from the Institute for Health Metrics and Evaluation .....	5
Update on the national burden of disease manual .....	5
Recent and potential publications.....	6
Conclusions and next steps.....	6
References .....	8
Annex 1. Programme of work .....	9
Annex 2. Workplan .....	11
Annex 3. List of participants .....	16

## Abbreviations

BoD	burden of disease
EHI	European Health Information Initiative
EUPHA	European Public Health Association
EVIPNet	Evidence-Informed Policy Network
GBD	Global Burden of Disease
IHME	Institute for Health Metrics and Evaluation
OECD	Organization for Economic Co-operation and Development
RKI	Robert Koch Institute
SCHIN	Small Countries Health Information Network
UBA	Umweltbundesamt (German Federal Environment Agency)

## Executive summary

The third meeting of the European Burden of Disease Network was convened by the WHO Regional Office for Europe on 22–23 August 2017 in Berlin, Germany, and hosted by the Robert Koch Institute. The meeting was attended by a range of international burden of disease (BoD) experts from the WHO European Region (including Belgium, Denmark, France, Georgia, Germany, Ireland, Poland, Russian Federation, Serbia, Sweden, Switzerland, Slovenia and the United Kingdom of Great Britain and Northern Ireland) and by representatives of the Institute for Health Metrics and Evaluation (IHME). The BoD Manual Working Group met on 21 August 2018, the day before the Network meeting.

Considerable progress has been made since the second meeting: a further draft of the national BoD manual has been produced; several countries have published subnational BoD estimates or started their own national burden of disease projects; and IHME has implemented new features. Furthermore, the European Health Information Initiative (EHII), which aims to improve data interoperability and harmonization across the Region, continues to provide training opportunities in the BoD approach through its Autumn School and other courses.

Participants described a wide range of progress and approaches to BoD work across the Region. A few countries reported that they have secured funding and taken first steps, often focusing on selected diseases and risk factors. Other countries have been working on BoD activities for several years, extending their approaches step by step, and have started to connect estimates on burden and risk factors with socioeconomic factors, while others are extending the spectrum of burden of disease to foodborne diseases. Participants also described various challenges facing BoD studies undertaken so far. These include sustainability of resources and improvements in methodology. Participants shared examples of national successes: for instance, Poland has undertaken subnational estimates and Germany has started a burden of disease study at a subnational level. IHME has published burden of disease and risk factor papers specifically for the Russian Federation; its visualization tool is available in an increasing number of languages and has undergone numerous improvements in terms of user-friendliness and subnational estimates.

The meeting achieved its purpose of further enhancing collaboration, discussing and agreeing on the development of the BoD manual, and facilitating effective knowledge exchange between experts in the field. The outcomes achieved were as follows.

### **Agreement on the content of and future steps for finalization of the national BoD manual**

Significant progress has been made since the signing of a memorandum of understanding between WHO and IHME on the preparation of a freely accessible and regularly updated national BoD manual. The purpose of the manual is to provide a practical guide that reflects advances in methodology and gives guidance on ways of undertaking national BoD studies that apply comparable and valid methods and a description of the strengths and limitations of various approaches. More detail about the manual can be found in the report of the second meeting of the BoD Manual Working Group. The main sections of the manual will include:

- key components
- summary information on conducting a national BoD study
- conducting a national BoD study – data, analysis, indicators
- analytical components
- subnational BoD
- resources and opportunities.

It is expected that the manual will be finalized by late 2018.

### **Identification of potential new areas of capacity-building**

The development of capacity-building in burden of disease methodology was discussed. Several existing and potential new training activities are available (as presented in COST and InfAct), which need to be integrated into the activities of the Network. In order to implement this plan, members of

the Network agreed to establish a subgroup to catalogue and examine opportunities for its members in training, publications, funding, communications and other technical issues and devise strategies to make use of them.

### **Revision of the workplan**

The workplan detailing specific strategic and technical activities was revised to cover the period until August 2019.

### **Production of a report**

The present report summarizes the discussions held, conclusions reached and action points agreed at the meeting.

The next steps will be to enhance knowledge transfer between countries, to expand the Network and to finalize the BoD manual. The workplan for the coming year was revised to realize these aims.

## Introduction

The third meeting of the European Burden of Disease Network was convened by the WHO Regional Office for Europe on 22–23 August 2018 in Berlin, Germany, and hosted by the Robert Koch Institute. See Annex 1 for the programme of work and Annex 2 for the revised workplan of the Network. The meeting was attended by a range of international burden of disease (BoD) experts from the WHO European Region and the Institute for Health Metrics and Evaluation (IHME) (see Annex 3 for the list of participants). The BoD Manual Working Group met on 21 August 2018, the day before the Network meeting.

The meeting was opened by the Chairperson Professor John Newton (Chief Knowledge Officer, Public Health England and Chair of the Network) and Dr Claudia Stein (Director, Division of Information, Evidence, Research and Innovation, WHO Regional Office for Europe). Dr Aline Anton was elected as rapporteur. The programme of work was adopted. Professor Lothar Wieler, President of the Robert Koch Institute, welcomed participants and formally addressed the meeting, outlining the importance of the network and the national BoD studies, including the planned study in Germany.

## Objectives of the meeting

The purpose of the third meeting of the Network was to further enhance collaboration among this diverse group of countries sharing similar aims; to discuss and finalize the national BoD manual; and to enable effective knowledge exchange between experts in the field. The expected outcomes included:

- agreement on the content of and future steps for the finalization of the BoD manual;
- identification of potential new areas of work;
- revision of the Network workplan;
- production of a report summarizing the discussion, conclusions reached and action points agreed at the meeting.

## Participants in the third meeting of the European Burden of Disease Network (Berlin, Germany, 22–23 August 2018)





## Recent developments in the WHO European Region

Dr Stein thanked the Robert Koch Institute for generously funding the participation of new Network members. She provided an update on recent developments. The European Health Information Initiative (EHII) (1) is a WHO network committed to improving the information that underpins health policies in the Region. It promotes international cooperation to support the exchange of expertise, build capacity and harmonize processes in data collection and reporting. Stakeholders include WHO Member States, WHO collaborating centres, international associations such as the European Public Health Association (EUPHA),<sup>1</sup> and charitable foundations such as the Wellcome Trust (United Kingdom). The European Commission and the Organization for Economic Co-operation and Development (OECD)<sup>2</sup> are also active participants. The EHII works in six key areas:

- gathering and analysing information that deepens the understanding of health and well-being, with a focus on indicators;
- enhancing access to and dissemination of health information;
- building capacity;
- strengthening health information networks;
- supporting the development of health information strategies; and
- communication and advocacy.

Developments within the EHII have implications for national and international BoD projects within the Region. These include: the new memorandum of understanding between WHO and IHME (2), which increases the collaboration between the two agencies and will be relevant for the production of the impact framework for WHO's Thirteenth General Programme of Work 2019–2023; the web-based European Health Information Gateway;<sup>3</sup> *Public Health Panorama*, the bilingual (English and Russian) public health journal for the Region, which may also be used as a vehicle for BoD dissemination and is currently seeking assessment of its impact factor (3); training in burden of disease methods provided by IHME at the annual Autumn School on Health Information and Evidence for Policy-making and the associated Advanced Course;<sup>4</sup> and the Evidence-informed Policy Network (EVIPNet) Europe.<sup>5</sup> In addition, new networks were presented, including the Small Countries Health Information Network (SCHIN) (4) and the South-eastern European Health Information Network (HICNET) (5). The goal of the EHII is to achieve interoperability and harmonization of health information within the Region. This would not only reduce the reporting burden for individual countries but would also improve data quality and strengthen international cooperation. BoD activities would be a direct beneficiary of, and possibly a contributor to, this integration. Furthermore, a joint monitoring framework combining a reduced set of indicators from Health 2020, the European health policy framework; the United Nations Sustainable Development Goals; and the WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020 will be presented to the Regional Committee for Europe for adoption at its 69th session in September 2019.

## Update by participants on recent national developments

Participants reported on BoD developments in 14 different countries (Belgium, Denmark with Greenland, France, Georgia, Germany, Ireland, Norway, Poland, the Russian Federation, Serbia, Slovenia, Sweden, Switzerland and the United Kingdom). A few countries, including Belgium, Norway, Sweden and the United Kingdom, have been working on burden of disease for several years

---

<sup>1</sup> <https://eupha.org>, accessed 3 March 2019.

<sup>2</sup> [www.oecd.org](http://www.oecd.org), accessed 3 March 2019.

<sup>3</sup> <https://gateway.euro.who.int/en/>, accessed 3 March 2019.

<sup>4</sup> <http://www.euro.who.int/en/media-centre/events/events/2017/10/autumn-school-on-health-information-and-evidence-for-policy-making>, accessed 3 March 2019.

<sup>5</sup> <http://www.euro.who.int/en/data-and-evidence/evidence-informed-policy-making/evidence-informed-policy-network-evipnet>, accessed 3 March 2019.

and have started to generate subnational BoD estimates; other countries, e.g. France and Germany, have just started using the BoD approach. There is a wide range of different approaches seen across Europe in the way in which BoD studies are undertaken. For example, in the United Kingdom, Scotland has undertaken its own BoD analyses independent of IHME but drawing on its methodology; the reason for this was local contextual concerns about the severity distributions and synthetic prevalence estimates generated by IHME. Improvements and next steps for countries like England that are working in close collaboration with and effectively using the IHME approach is to link their subnational data with socioeconomic factors in respect of certain risk factors.

Germany has started its own burden of disease study as a pilot project with selected diseases, using its own severity distributions. Most other countries are using the estimates provided by IHME. Participants noted that using a selection of diseases is a good start, but it does not show the overall picture so that the burden of disease can be compared comprehensively. The procedure may also lead to an overestimate of those diseases that are reported, since they are not included in the overall envelope for morbidity.

Another subject reported by participants already working on BoD estimates is the presence and availability of good health monitoring and health data for nonfatal illnesses. Capturing special groups such as migrants and the elderly, including people living in institutions, is one of the key factors in improving the estimates for burden of disease. In addition, high-quality electronic health records in primary care are a good source of data, as are annual population surveys (Germany, United Kingdom). The variation in quality of death certification and coding adversely affects the quality of mortality statistics. In cooperation with the University of Melbourne, Australia, countries like Denmark and Switzerland are using, or intend to use, ANACONDA, a software tool to analyse and hence improve the quality of cause-of-death data and improve data coding. Other common themes reported by participants are described below.

### Capacity-building and knowledge transfer

As one of the main themes of the workshop, the enhancement of capacity-building was discussed by all participants. Several new and existing training activities are available, such as COST and InfAct (see below), which need to be integrated into activities under the umbrella of the Network. As a consequence, the mapping of all existing training activities was proposed as a new item for the workplan, and consideration was given to ways in which further methodological training could best be achieved within the group. Updates on two networks were presented by members.

Dr Brecht Devleesschauwer (Belgium) reported on the **European Cooperation in Science and Technology (COST)** programme.<sup>6</sup> COST is a programme funded by the European Union that enables researchers to set up interdisciplinary research networks in Member States of the Union and beyond. The programme is available to European Union Member States and accession countries. Since it is necessary to get seven full or cooperating country members involved in a proposal for COST, it is proposed that the Network should apply for support for its activities. Participants welcomed the idea of additional support, but considered that it is important to avoid creating a parallel BoD network and imperative that all Member States of the WHO European Region should be able to participate. It was therefore suggested that, if such an activity is taken forward, it should be integrated into the Network and be linked with training already provided by others, including IHME.

Professor John Newton (United Kingdom) and Dr Anne Gallay (France) reported on the **InfAct (Information for Action!)** programme.<sup>7</sup> The Joint Action on Health Information is a 36-month project funded by the European Commission, launched in March 2018. It builds on the BRIDGE Health project and other initiatives in health information and is available to European Union Member States and accession countries. Within Work Package 9, led by France and Lithuania, InfAct was used to promote a BoD approach. Although funding has been reduced, France will be able to provide training workshops for 12–14 participants, and IHME will be asked to contribute. It is planned to provide a two-day introduction to the national BoD manual, similar to the WHO Autumn School, showing ways

---

<sup>6</sup> <https://www.cost.eu>, accessed 3 March 2019.

<sup>7</sup> <https://www.inf-act.eu/>, accessed 3 March 2019.

to use the manual for BoD studies at an advanced level. Participants welcomed these activities for the dissemination of knowledge and were keen to support them by offering help in training (Poland, Russian Federation, United Kingdom).

### **Early stages of burden of disease work**

The difficulty of securing funding for national BoD work and undertaking BoD projects with limited resources is still an issue. Nevertheless, a number of participants spoke about their efforts to advance their work on burden of disease. Participants reported that they had been able to undertake initial steps and are currently making efforts to improve structures with the aim of financing and conducting a complete national burden of disease study in the future. Until then, because of the limited resources for BoD work, the existing activities will begin with individual diseases or risk factors and be gradually expanded. Some countries reported that they had extended their BoD activities to foodborne diseases or mental disorders, for example.

The participant from **Belgium** reported that, although there is no specific funding, the Belgium health status report will be published in early 2019 and the Minister of Health wishes to continue support for BoD and fund additional staff members who will work on estimates of disability-adjusted life-years as a priority, as well as rare diseases using IHME and OECD methods, subnational estimates for three regions and behavioural risk factors such as sugar and tobacco consumption. In addition, there is progress in BoD activities relating to foodborne diseases and publications have been prepared in the field of environmental research.

Although there are no plans to conduct an independent BoD study, participants from **Denmark** reported work in two main areas. The first relates to epidemiology, comorbidity (with physical disorders) and economic costs of mental disorders, conducted in collaboration with Australia and accompanied by training courses and a symposium on mental health. The second is work on foodborne diseases, with estimates of the burden of disease due to unsafe food and risk factors for foodborne diseases, including pathogens and chemicals.

**France** expects to start a BoD study on a subnational level in 70 departments, with reports based on IHME outputs. The relevant scientific committee has decided to give priority status to BoD and aims to use the Network to support exchanges of experience.

The participant from **Georgia** explained that the country currently provides no financial support for BoD but requested the creation of a consultation group within the Network to address relevant questions and obtain peer-to-peer support.

The participant from **Poland** said that the country had initially prepared BoD estimates at a subnational level for 49 regions, with three institutions working on BoD. It now planned to change to 16 regions rather than 49, with the aim of using IHME methodology.

Participants from the **Russian Federation** reported on an article on the global burden of disease (GBD) in *The Lancet*, to be published shortly, and efforts in capacity-building through seminars and webinars. The country wishes to extend its activities to subnational data and analysis, including other Russian-speaking countries.

As the **Serbian** participant reported, the country plans to apply to the Ministry of Education, Science and Technological Development for funding, and is currently focusing on specific diseases in the context of master's and PhD theses. As a first step, it is analysing the quality of data on symptoms, signs and ill-defined causes of death in Serbia, Bosnia and Herzegovina and Croatia.

As the **Slovenian** participant reported, people working in the field of BoD will concentrate on building further knowledge, with training on BoD provided by WHO and IHME. There are plans to strengthen collaboration with IHME and extend the current work in the field of diabetes and alcohol consumption. A provisional report on BoD has been submitted to the Minister of Health to show the potential of BoD, and the estimates will then be improved.

Participants from **Sweden** reported a rising interest in BoD from stakeholders and the Director-General of the Public Health Agency of Sweden. They have applied for funding and will start their

BoD study with minor grants, data collection for a regional BoD study with socioeconomic factors and a visualization tool.

## Update from the Institute for Health Metrics and Evaluation

IHME continues its close collaboration with the WHO Regional Office for Europe, supported by the memorandum of understanding (2), in developing the BoD manual, supporting training and raising awareness of GBD.

The next wave of GBD data (GBD 2017) will be published in the first week of November (see, for instance, 6); the subsequent GBD study (GBD 2019) will be published in May 2020. There will be no GBD 2018 study, because from 2020 onwards the publication cycle will be shifted to the second quarter of the year. As part of the upcoming analysis, IHME has produced subnational estimates for the Islamic Republic of Iran, Italy, Nigeria, Norway, Pakistan and the Philippines. BoD efforts are also ongoing in Italy, Spain and Ukraine. IHME proposed that Italy should join the Network.

In the field of geospatial research, IHME is presenting 5x5-kilometre areas for the estimation of the local burden, focusing on regions of Africa. Initially, the three main parts of the estimates cover 17 health-related indicators, years of schooling and education, and forecasting. This will be accompanied by a publication introducing the microsimulation methodology, an aggregated list showing all causes and the scenario of forecasting.

As new features, IHME will present a risk-factor evidence score indicating the relationship between risk and outcomes. Also, insights will be given into the quality of the data and cycles of change (data change or model change) to make methodological changes more visible and thus improve transparency. As a way to get collaborators more in touch with the methodology, IHME and other stakeholders will improve ways of reviewing models or integrating an in-house application programming interface to put GBD outcomes into countries' own databases.

IHME will continuously improve capacity-building, for example to boost country-specific and regional training. In addition, an online BoD course (in English) has been set up and has proved useful as a basis for IHME training courses in Greece. A webinar shows the best practices of successful collaborators and is available free of charge to collaborators.

The visualization tool GBD compare (6) is available in an increasing number of languages; it has recently been translated into Russian.

## Update on the national burden of disease manual

In May 2015, a memorandum of understanding was signed between WHO and IHME (2), which included the ambition to produce a national BoD manual on conducting national BoD studies. The manual is intended as a practical guide that reflects advances in methodology, provides guidance on the conduct of a national BoD study and describes the strengths and limitations of various BoD approaches. The manual recognizes that BoD studies cover a spectrum, ranging from studies that rely entirely on IHME infrastructure to those that are completely stand-alone. A first draft of the manual was produced in August 2016. Since then, the manual has undergone several further iterations, based on comments from national BoD experts. Members of the BoD Manual Working Group welcomed the progress made on the manual since the previous draft.

Currently, the main sections of the national BoD manual include:

- key components of BoD
- conduct of a national BoD study, summary information (e.g. capacity and infrastructure)
- conduct of a national BoD study: data, analysis, indicators
- analytical components
- subnational BoD
- resources and opportunities.

The manual will be produced in a way that is neutral and value-free – not advocating any one approach or organization, but rather describing the strengths and limitations of different approaches.

The second meeting of the Network BoD Manual Working Group took place on 21 August 2018, the day before the main Network meeting. A revised draft of the national BoD manual was shared by IHME with members of the group prior to the meeting. An update on progress on the national BoD manual was given by Ms Meghan Mooney, IHME, and the participants warmly welcomed the enormous progress made since the previous version. The draft was discussed, and several final suggestions for additions and revisions were identified and presented by the working group. A separate report will be produced to summarize the discussion and future action. IHME agreed to distribute a revised draft of the manual to the working group. A further revision is planned for October 2018, with a final version due by the end of 2018.

## Recent and potential publications

Ideas for new publications arose during the meeting, especially during the discussion of the Regional Office publication *Public Health Panorama*, and it was proposed that the Network should submit a joint paper to the journal, as well as a viewpoint paper on the uses of the GBD approach. Members of the Network informed one another of published and planned publications on BoD.

The participant from Scotland reported on plans to update results from the Scottish study, to be published in August 2018, including additional analyses of health inequalities in the disease burden in Scotland, the redistribution of mortality statistics including “ill-defined death” following identification of the underlying cause of death and the plan to supply these data to the GBD/IHME (7). There are further plans to examine the extent to which the impact of low socioeconomic status on the burden of disease in Scotland is mediated through behavioural pathways.

Participants from Germany reported on their initial work on burden of disease estimates at a subnational level (8). The German Federal Environment Agency (UBA) published two papers about environmental risk factors (9,10). Participants from Denmark reported that a BMC Health Services Research method paper and a mortality paper on Greenland are planned. Network members from Belgium have also published on environmental BoD (11). Two articles on BoD in the Russian Federation have been published in *The Lancet* (12, 13).

## Conclusions and next steps

The third meeting of the Network deepened collaboration and knowledge transfer between national experts in BoD studies. Participants were keen to see the Network grow by improving communication about its purpose and increasing mutual support between members. In 2017, participants had requested an increase in the number of Network members and to strengthen collaborations. This was achieved through generous funding by the Robert Koch Institute and participation of members from Georgia, Poland, Serbia and Slovenia, who enriched the meeting with their experiences. More and more countries are interested in developing BoD projects but lack the necessary expertise and resources. Participants stated that the Network should therefore continue to encourage members and other countries to engage in BoD studies and to share good practice, this time focusing on capacity-building, methodological exchange and knowledge translation.

Significant progress has been made by the Network and IHME in finalizing the national BoD manual, as all participants commented to IHME; the forthcoming publication of the manual will be a significant achievement for both the Network and IHME.

The Network organized a BoD workshop at the EUPHA Conference 2018, and Network members, in particular Belgium, Germany, Netherlands and England, will share their national experiences of BoD studies. The WHO Regional Office for Europe will contribute an overview lecture.

There have been several positive developments in national BoD studies – notably, generating subnational estimates, expanding burden of disease estimates to foodborne diseases in more countries and the launch of the German BoD study BURDEN 2020. However, various challenges remain for those undertaking BoD studies, including capacity-building and funding, engagement by stakeholders,

identifying the best available data, for subnational and other estimates and ensuring transparency of data. The next steps will be:

- to continue collaboration and knowledge transfer between countries
- to expand the Network
- to finalize the BoD manual by late 2018.

The Network's workplan was revised in order to realize these aims (see Annex 2).

A subgroup on strategizing work streams of the Network was set up. The WHO Secretariat will draft terms of reference and invite participants to a virtual meeting in the autumn. The specific aims of the subgroup are to:

- advise on existing and upcoming relevant opportunities for training and strategize participation of Network members;
- advise on a process for joint publications;
- recommend appropriate processes for communication within and beyond the group;
- facilitate the sharing of experiences between the IHME and member countries in relation to methodological and other developments in the field;
- identify funding opportunities and strategize their implementation for the Network.

## References

1. European Health Information Initiative. In: WHO Regional Office for Europe [website]. Copenhagen: WHO Regional Office for Europe; 2019 (<http://www.euro.who.int/en/data-and-evidence/european-health-information-initiative-ehii>, accessed 3 March 2019).
2. Memorandum of understanding between the World Health Organization and the Institute for Health Metrics and Evaluation ([http://www.healthdata.org/sites/default/files/files/MOU\\_IHME\\_WHO\\_050615.pdf](http://www.healthdata.org/sites/default/files/files/MOU_IHME_WHO_050615.pdf), accessed 3 March 2019).
3. About Panorama. In: WHO Regional Office for Europe [website]. Copenhagen: WHO Regional Office for Europe; 2015 (<http://www.euro.who.int/en/publications/public-health-panorama/about-panorama>, accessed 3 March 2019).
4. Small Countries Health Information Network Report. In: WHO Regional Office for Europe [website]. Copenhagen: WHO Regional Office for Europe; 2016 (<http://www.euro.who.int/en/countries/malta/news/news/2016/07/small-countries-health-information-network-report>, accessed 3 March 2019).
5. South-eastern Europe Health Network (<http://www.euro.who.int/en/about-us/networks/south-eastern-europe-health-network-seehn>, accessed 3 March 2019).
6. GBD Compare – Public Health England. Seattle (WA): Institute for Health Metrics and Evaluation; 2017 (<https://vizhub.healthdata.org/gbd-compare/england>, accessed 3 March 2019).
7. Mesalles-Naranjo O, Grant I, Wyper GMA, Stockton D, Dobbie R, McFadden M et al. Trends and inequalities in the burden of mortality in Scotland 2000–2015. *PloS ONE*. 2018;13(8):e0196906 (<https://doi.org/10.1371/journal.pone.0196906>, accessed 3 March 2019).
8. Rommel A, von der Lippe E, Plaß D, Wengler A, Anton A, Schmidt C et al. BURDEN 2020—Burden of disease in Germany at the national and regional level. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz*. 2018;61:1159. <https://doi.org/10.1007/s00103-018-2793-0>.
9. Tobollik M, Plaß D, Steckling N, Mertes H, Myck T, Ziese T et al. Umweltbedingte Krankheitslasten in Deutschland [Environmental burden of disease in Germany]. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz*. 2018;61:747 (<https://doi.org/10.1007/s00103-018-2734-y>, accessed 3 March 2019).
10. Tobollik M, Plaß D, Steckling N, Zeeb H, Wintermeyer D, Hornberg C. Das Konzept der umweltbedingten Krankheitslast [The environmental burden of disease concept]. *Gesundheitswesen*. 2018;80(02):154-9. doi: 10.1055/s-0043-110851.
11. Schwingshackl L, Schlesinger S, Devleeschauwer B, Hoffmann G, Bechthold A, Schwedhelm C et al. Generating the evidence for risk reduction: a contribution to the future of food-based dietary guidelines. *Proc Nutr Soc*. 2018;1-13. doi:10.1017/S0029665118000125.
12. GBD 2016 Russia Collaborators. The burden of disease in Russia from 1980 to 2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet*. 2018;392:1138-46 ([https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)31485-5/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)31485-5/fulltext), accessed 3 March 2019). doi: [https://doi.org/10.1016/S0140-6736\(18\)31485-5](https://doi.org/10.1016/S0140-6736(18)31485-5).
13. Reim J, Ferreira-Borges C. Risk factor policies, morbidity, and mortality in Russia. *Lancet*. 2018;392:1094-5 ([https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)32043-9/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)32043-9/fulltext), accessed 3 March 2019). doi: [https://doi.org/10.1016/S0140-6736\(18\)32043-9/](https://doi.org/10.1016/S0140-6736(18)32043-9/).

## Annex 1. Programme of work

### Wednesday, 22 August 2018

08:30–08:45	Registration
08:45–09:00	Welcome and opening remarks <i>Professor John Newton, Chair of the Network, and Dr Claudia Stein, WHO Regional Office for Europe</i>
09:00–09:20	Introduction of participants
09:20–09:25	Election of the rapporteur <i>Chair, WHO Secretariat</i>
09:25–09:30	Adoption of the agenda and programme <i>Chair</i>
09:30–10:00	Update on recent developments in the field of BoD and related areas in the WHO European Region <i>WHO Secretariat</i>
10:00–10:15	<b>Coffee break</b>
10:15–12:00	Presentation of the results of the second meeting of the BoD Manual Working Group <i>Chair of the Working Group</i> Discussion COST Action proposal on burden of disease <i>Brecht Devleesschauwer, Belgium</i> InfAct Update <i>John Newton, Public Health England</i> Discussion
12:00–13:00	<b>Lunch break</b>
13:00–14:00	National Burden of Disease Study, Germany – update by Robert Koch Institute <i>Alexander Rommel and Elena von der Lippe, Robert Koch Institute</i> Discussion
14:00–14:30	Official welcome address by hosts <i>Professor Lothar Wieler, President, Robert Koch Institute, Germany</i>
14:30–14:45	Group photo
14:45–15:25	Reflection on and summary of day 1 <i>Chair, WHO Secretariat, IHME</i>
15:25–15:45	<b>Coffee break</b>
15:45	<b>Departure to the German Parliament, the Bundestag</b> Guided tour of the German Bundestag



**Thursday, 23 August 2018**

- 09:00–09:15            Summary of the key points outlined in day 1 and expectations for day 2  
*Rapporteur, WHO Secretariat*
- 09:15–11:00            Update on recent developments in the field of Burden of Disease (BoD) and  
related areas at national level by participants  
*All*
- 11:00–11:20            Coffee break
- 11:20–11:25            Recent and planned publications of the Network  
*All*
- 11:25–12:00            Proposed new work  
Including update on EUPHA Workshop proposal  
*RKI (Thomas Ziese, Elena von der Lippe)*
- 12:00–12:45            Revision of the Network workplan and next steps  
*All*
- 12:45–13:00            Any other business  
*All*
- 13:00–13:15            Date of next meeting
- 13:15–13:30            Closing remarks  
*Chair, Robert Koch Institute, WHO Secretariat*
- 13:30 onwards            Lunch and departures

## Annex 2. Workplan

Priority activities	Description of activity	Core deliverable	Priority	Lead	Time frame															
					2016		2017				2018				2019					
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
<b>Strategic activities</b>																				
	Ensure sustainability of BoD work at the national level	Rationale (and generic benefits) to support national bids for resources to perform BoD studies		Dietrich Plaß, Brecht Devleeschauwer												X				
	Establish Working Group for the finalization of BoD Manual		1	WHO Regional Office for Europe					X											
	Develop and publish BoD Manual	Interim draft		IHME												X				
		Final draft for discussion with WHO and Regions		IHME												Spring 2018 (pending IHME confirmation)				
		<b>Finalize approved draft and submit to Regional Office for discussion with headquarters</b>		IHME												<b>X</b>				
	Articulate what the Network requires from WHO, IHME and governments to proceed	Network manifesto		All					X											

Priority activities	Description of activity	Core deliverable	Priority	Lead	Time frame															
					2016		2017				2018				2019					
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
	Publish manifesto on WHO/Europe website			WHO						X										
	Provide a strategic forum to articulate the strengths and weaknesses of different approaches to, and operational requirements of, BoD studies	Plan half-day session for next in-person meeting to discuss		WHO Regional Office for Europe						X Done on 22 Aug 2017										
		Outputs of discussion to become part of meeting report and part of BoD Manual									X									
	Outreach to potential members			Sara Monteiro Pires				Next 6 months												
		WHO call for experts (developing BoD group in its current form)		WHO							X									
		Engage IANPHI in promotion of BoD		PHE/John Newton									X							
		Explore the options for a BoD workshop in EUPHA-2018		RKI/Thomas Ziese (EUPHA / EHII focal point to be potentially involved)								X								
		To support development of the Joint Action on Health Information in relation to BoD		PHE/John Newton Santé France/Anne Gallay										X						

Priority activities	Description of activity	Core deliverable	Priority	Lead	Time frame											
					2016		2017		2018		2019					
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
		To take forward/report actions from the Joint Action		PHE/John Newton Santé France/Anne Gallay								X				
	An inventory of networks and groups working with BoD			Ian Grant and Peter Allebeck		X										
		Collect information on other European networks /groups doing any BoD work and provide to Secretariat		all						X						
	Promote access to data	Review reports from IHME on data revision		All/IHME to provide reports	Throughout		X									
		Draft a discussion paper about improving availability of data for the next meeting		Brecht Devleeschauwer, Claudia Stein, Emilie Agardh, Thomas Fürst, Ian Grant, IHME											X	
	Link IHME and EHII (and extend an invitation to join EHII)			WHO Regional Office for Europe			X									
	Ensure the appropriate use of BoD results in practice	Report back on experience		All			X						X			
	Identify opportunities for BoD training and translation of material into national languages			All			X						X			
		Explore regional training /		WHO, IHME									X			

Priority activities	Description of activity	Core deliverable	Priority	Lead	Time frame										
					2016		2017		2018		2019				
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Engagement with knowledge translation platforms	Present the KT tools and options to the Network at the next meeting	opportunities for future training and report at the next meeting		WHO								X			X
		<b>Draft editorial on knowledge translation for European Journal of Public Health by WHO</b>		<b>WHO</b>										X	
<b>Strategize all activities the Network wishes to prioritize</b>	<b>Establish WG for strategy and planning</b>	<b>Draft concept note and circulate to group</b>		<b>WHO</b>									X		
Funding	Add to IANPHI request to fund Network attendance			Public Health England/ John Newton								X	X		
	Explore funding for training			IHME								X			
	<b>Draft proposal to submit to COST for networking</b>			Brecht Devleesschauwer								X			
<b>Technical activities</b>															
Provide technical expertise and share experience	Contribute to the development of national BoD manual	Review meeting Technical input into the draft Review of final draft as group		Members of Working Group				X					X		
	Contribute methodological expertise to	Sign-up to collaborate and peer-review GBD		All (on voluntary basis)									X		



### Annex 3. List of participants

Dr Emilie Agardh  
Assistant Professor  
Department of Public Health Sciences  
Karolinska Institutet, Sweden

Professor Peter Allebeck  
Professor/Senior Physician  
Department of Public Health Sciences  
Karolinska Institutet, Sweden

Dr Aline Anton (Rapporteur)  
Department of Epidemiology and Health  
Monitoring  
Robert Koch Institute, Germany

Dr Brecht Devleesschauwer  
Epidemiologist  
Scientific Institute of Public Health, Belgium

Dr Thomas Fürst (via videolink)  
Senior Scientific Collaborator  
Department of Epidemiology and Public  
Health  
Swiss Tropical and Public Health Institute,  
Switzerland

Dr Anne Gallay  
Director  
Noncommunicable diseases  
Santé publique, France

Dr Ian Grant  
Principal Researcher  
Scottish Burden of Disease Study  
Scottish Public Health Observatory, United  
Kingdom of Great Britain and Northern Ireland

Dr Zubair Kabir (via videolink)  
Senior Lecturer  
School of Public Health  
University College Cork, Ireland

Mr Konstantin Kazanjan  
Chief Specialist  
Department of Medical Statistics  
National Center for Disease Control and Public  
Health, Georgia

Dr Katarzyna Kissimova-Skarbek  
Department of Health Economics and Social  
Security  
Institute of Public Health – Faculty of Health  
Sciences, Poland

Ms Tina Lesnik  
National Institute of Public Health, Slovenia

Dr Elena von der Lippe  
Department of Epidemiology and Health  
Monitoring  
Robert Koch Institute, Germany

Professor Kim Moesgaard Iburg  
Associate Professor  
Department of Public Health – Department of  
Public Health Services Research  
Aarhus University, Denmark

Ms Meghan Mooney  
Senior Engagement Manager  
Institute for Health Metrics and Evaluation,  
United States of America

Professor John Newton  
Chief Knowledge Officer  
Public Health England, United Kingdom of  
Great Britain and Northern Ireland

Dr Sara Pires (via videolink)  
National Food Institute  
Technical University of Denmark, Denmark

Mr Michael Porst  
Department of Epidemiology and Health  
Monitoring  
Robert Koch Institute, Germany

Mr Alexander Rommel  
Department of Epidemiology and Health  
Monitoring  
Robert Koch Institute, Germany

Professor Dr Milena Šantrić Milićević  
Institute of Social Medicine  
University of Belgrade Faculty of Medicine,  
Serbia

Sergey Soshnikov (via videolink)  
Assistant Professor  
First Moscow State Medical University  
Russian Federation

Professor Nicolas Steel  
University of East Anglia, United Kingdom of  
Great Britain and Northern Ireland

Ms Myriam Tobollik  
German Federal Environment Agency,  
Germany

Dr Elena Varavikova (via videolink)  
Lead Researcher  
Department of Human Resources in Health  
Analysis  
Federal Research Institute for Health  
Organization and Informatics of the Ministry  
of Health, Russian Federation

Dr Annelene Wengler  
Department of Epidemiology and Health  
Monitoring  
Robert Koch Institute, Germany

Dr Thomas Ziese  
Head of Unit Health Reporting  
Department of Epidemiology and Health  
Monitoring  
Robert Koch Institute, Germany

**World Health Organization Regional Office  
for Europe**

Dr Claudia Stein  
Director  
Division of Information, Evidence, Research  
and Innovation  
WHO Regional Office for Europe, Denmark



## The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

### Member States

Albania  
Andorra  
Armenia  
Austria  
Azerbaijan  
Belarus  
Belgium  
Bosnia and Herzegovina  
Bulgaria  
Croatia  
Cyprus  
Czechia  
Denmark  
Estonia  
Finland  
France  
Georgia  
Germany  
Greece  
Hungary  
Iceland  
Ireland  
Israel  
Italy  
Kazakhstan  
Kyrgyzstan  
Latvia  
Lithuania  
Luxembourg  
Malta  
Monaco  
Montenegro  
Netherlands  
North Macedonia  
Norway  
Poland  
Portugal  
Republic of Moldova  
Romania  
Russian Federation  
San Marino  
Serbia  
Slovakia  
Slovenia  
Spain  
Sweden  
Switzerland  
Tajikistan  
Turkey  
Turkmenistan  
Ukraine  
United Kingdom  
Uzbekistan

### World Health Organization Regional Office for Europe

UN City, Marmorvej 51, DK-2100 Copenhagen Ø, Denmark

Tel: +45 45 33 70 00 Fax: +45 45 33 70 01

Email: [eucontact@who.int](mailto:eucontact@who.int)

Website: [www.euro.who.int](http://www.euro.who.int)