

EUROPEAN ADVISORY COMMITTEE ON HEALTH RESEARCH



**Eighth Meeting, Copenhagen, Denmark,
8–9 May 2017**





European Advisory Committee on Health Research

Eighth Meeting, Copenhagen, Denmark, 8–9 May 2017

ABSTRACT

The European Advisory Committee on Health Research (EACHR) reports directly to the World Health Organization (WHO) Regional Director for Europe. Its purpose is to advise on the formulation of policies for the development of health research; review the scientific basis of selected regional programmes; advise on new findings on priority public health issues and evidence-based strategies to address them; and facilitate the exchange of information related to research agendas and evidence gaps. The Committee held its eighth formal meeting in Copenhagen, Denmark, on 8–9 May 2017. It offered advice on a range of research topics, including big data, childhood obesity, immunization, antimicrobial resistance, implementation research, the cultural contexts of health and well-being, migration and health, and mental health. It reviewed the implementation of previously agreed actions, and put forward new recommendations and action points. The Committee also identified key issues for future consideration, including value-based health care and work on the developmental origins of health and disease and the life-course.

Keywords:

- health research
- health management and planning
- health policy
- health status indicators
- public health administration
- strategic planning

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

Publications
WHO Regional Office for Europe
United Nations 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 2017

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 borderlines 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 express 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	vi
EXECUTIVE SUMMARY	vii
INTRODUCTION	1
OPENING SESSION	2
INTRODUCTORY REMARKS BY THE WHO REGIONAL DIRECTOR FOR EUROPE	2
<i>Global priorities</i>	2
<i>Regional priorities</i>	3
<i>EACHR discussion and recommendations</i>	4
<i>Action points</i>	5
REVIEW OF THE IMPLEMENTATION STATUS OF PREVIOUS EACHR RECOMMENDATIONS	5
<i>Public health and migration</i>	5
<i>CCH</i>	5
<i>Prevention and control of NCDs</i>	5
<i>Operational plan to take forward the Global strategy for women’s, children’s and adolescents’ health</i>	5
<i>Draft global plan of action on violence</i>	6
<i>DOHaD and the life-course</i>	6
<i>EACHR subgroup on evidence-informed policy-making</i>	6
<i>European Health Information Initiative (EHII)</i>	6
<i>European framework for action on integrated health services delivery</i>	6
<i>Development of action plans for the health sector responses to HIV and viral hepatitis in the WHO European Region 2016–2021</i>	6
<i>EACHR discussion and recommendations</i>	6
<i>Action points</i>	7
BIG DATA AND THEIR POTENTIAL USE FOR HEALTH RESEARCH	7
<i>Presentation</i>	7
<i>EACHR discussion and recommendations</i>	8
<i>Action points</i>	8
ENDING CHILDHOOD OBESITY: IDENTIFYING RESEARCH PRIORITIES	9
<i>Presentation</i>	9
<i>EACHR discussion and recommendations</i>	9
<i>Action points</i>	10
VACCINE-PREVENTABLE DISEASES AND IMMUNIZATION: THE ROLE OF RESEARCH IN PREVENTING OUTBREAKS	10
<i>Presentation</i>	10
<i>EACHR discussion and recommendations</i>	10
<i>Action points</i>	11
AMR AND NOSOCOMIAL INFECTION: WHAT ARE THE RESEARCH ISSUES?	11
<i>Presentation</i>	11
<i>EACHR discussion and recommendations</i>	12

<i>Action points</i>	12
IMPLEMENTATION RESEARCH	13
<i>Introduction</i>	13
<i>Presentations</i>	13
<i>Commentaries</i>	15
<i>EACHR discussion and recommendations</i>	15
<i>Action points</i>	16
UPDATE: THIRD MEETING OF THE EXPERT GROUP ON CCH	16
<i>Presentation</i>	16
<i>EACHR discussion and recommendations</i>	17
<i>Action point</i>	17
UPDATE: MIGRATION AND HEALTH	17
<i>Presentation</i>	17
<i>EACHR discussion and recommendations</i>	18
MENTAL HEALTH: IDENTIFYING RESEARCH PRIORITIES	19
<i>Presentation</i>	19
<i>EACHR discussion and recommendations</i>	20
<i>Action point</i>	20
CONCLUSIONS	20
<i>EACHR recommendations</i>	21
CLOSURE OF THE MEETING	21
SUMMARY OF ACTION POINTS	21
REFERENCES	23
ANNEX 1. PROGRAMME AND AGENDA	26
ANNEX 2. LIST OF PARTICIPANTS	28

Abbreviations

AMR	antimicrobial resistance
CCH	cultural contexts of health and well-being
COHRED	Council on Health Research for Development
DOHaD	developmental origins of health and disease
EACHR	European Advisory Committee on Health Research
EHII	European Health Information Initiative
EVIPNet	Evidence-informed Policy Network
HEN	Health Evidence Network
IOM	International Organization for Migration
NCD	noncommunicable disease
SDG	Sustainable Development Goal
TDR	Special Programme for Research and Training in Tropical Diseases
UNECE	United Nations Economic Commission for Europe
UNHCR	Office of the United Nations High Commissioner for Refugees
UNICEF	United Nations Children’s Fund
WHO	World Health Organization

Executive Summary

The European Advisory Committee on Health Research reports directly to the World Health Organization (WHO) Regional Director for Europe. Its main terms of reference are to advise the Regional Director on the formulation of policies for the development of research for health in the WHO European Region; review the scientific basis of selected programmes of the WHO Regional Office for Europe; advise the Regional Director on new findings on priority public health issues and evidence-based strategies and policies to address them; and facilitate the exchange of information related to research agendas and evidence gaps in priority areas.

The Committee held its eighth meeting in Copenhagen, Denmark, on 8–9 May 2017. It reviewed progress on the action points and recommendations agreed at its seventh meeting, and explored and offered advice on several key research areas. These included big data, childhood obesity, immunization, antimicrobial resistance, implementation research, the cultural contexts of health and well-being (CCH), migration and health, and mental health.

The Committee also received updates on current WHO priorities, in particular progress towards the health-related Sustainable Development Goals (SDGs) and the development of a comprehensive monitoring and reporting framework for the SDGs, noncommunicable diseases and Health 2020. The Committee put forward new recommendations and action points in these areas.

The Committee provided guidance on aspects to be considered regarding the use of big data, in particular: the importance of reviewing good practices for the use of big data in policy-making; identifying public health problems and priorities that can best be addressed by big data; and regulating the relationship between the producers and users of big data.

The Committee discussed implementation research in detail. Members offered advice on how implementation studies could be incorporated into the work of the Regional Office, and how the Regional Office could further promote implementation research through the development of a toolkit. The Committee agreed to establish a subcommittee on implementation research comprising members whose mandates are due to continue into 2018, with terms of reference to be decided.

The Committee identified several additional areas where it could engage with the work of the Regional Office. These include:

- forming an expert group on big data;
- offering input to the forthcoming WHO dietary guidelines on fat intake;
- continuing work on the developmental origins of health and disease;
- mainstreaming CCH across all areas of work; and
- fostering trust in experts and evidence, particularly with regard to vaccine coverage to curb resurgences in vaccine-preventable diseases.

The Committee also reviewed the conduct of its formal meetings and recommended that, in future sessions, more time could be reserved for the discussion of new topics, and substantive contributions from other research entities could be encouraged.

Introduction

The European Advisory Committee on Health Research (EACHR) reports directly to the World Health Organization (WHO) Regional Director for Europe. Its purpose is to advise the Regional Director on the formulation of policies for the development of research on health in the WHO European Region; review the scientific basis of selected programmes of the WHO Regional Office for Europe; advise the Regional Director on new findings on public health priorities and evidence-based strategies and policies to address them; and facilitate the exchange of information related to research agendas and evidence gaps (Box 1).

Its rotating membership comprises public health research experts with a wide variety of specialist knowledge and experience drawn from Member States of the Region and international institutions.

Box 1. Terms of reference of the EACHR

1. Advise the Regional Director on formulation of policies for the development of research on health in the Region.
2. Review the scientific basis of selected programmes of the WHO Regional Office for Europe, with particular attention to their translational aspects.
3. Advise the Regional Director on new findings emerging from research on public health priorities, and effective evidence-based strategies and policies to address them.
4. Facilitate dialogue and interaction among the public health community, research bodies and funding agencies to exchange information on research agendas in the Region and address evidence gaps for priorities such as noncommunicable diseases (NCDs).
5. Facilitate the compilation and review of the results of major research programmes on public health priorities, and assess their implications for policy at the international, national and local levels.
6. Support the development of research potential and capability, nationally and regionally, with special attention to the eastern part of the Region.
7. Pursue harmonization of research activities in the Region with those in other regions and at the global level.
8. Formulate, as appropriate, ethical criteria for public health research.

The Committee held its eighth meeting in Copenhagen, Denmark, on 8–9 May 2017. It offered advice on a range of research topics, including childhood obesity, immunization, antimicrobial resistance (AMR), implementation research, the cultural contexts of health and well-being (CCH), migration and health, and mental health. It reviewed the implementation of previously agreed actions, and put forward new recommendations and action points to advance the priorities set by the WHO Regional Committee for Europe and the implementation of the health-related aspects of the 2030 Agenda for Sustainable Development (1).

The Committee discussed the role of big data in health research and policy-making in preparation for the technical briefing to be held during the 67th session of the Regional Committee. It also identified key issues for future consideration, including value-based health care and an update on the work on developmental origins of health and disease (DOHaD) and the life-course. The Committee recommended that CCH be mainstreamed across all activities, and agreed to establish a subcommittee on implementation research, with terms of reference to be developed.

Opening session

Professor Rozá Ádány, EACHR Vice-Chair and Head of the Department of Preventive Medicine, Faculty of Public Health, University of Debrecen, Hungary, opened the meeting and welcomed the participants.

Dr Zsuzsanna Jakab, WHO Regional Director for Europe, thanked Professor Ádány and welcomed the members of the EACHR. She also welcomed Ms Eva Falcão, Director of International Relations, Directorate-General of Health, Portugal, as a representative of the Standing Committee of the Regional Committee for Europe, and three guest speakers: Dr Janis Lazdins, Council on Health Research for Development (COHRED); Dr Piero Olliaro, WHO Special Programme for Research and Training in Tropical Diseases (TDR); and Dr Etienne Langlois, WHO Alliance for Health Policy and Systems Research.

Professor Tomris Türmen, EACHR Chair and President of the International Children’s Centre, Bilkent University, Turkey, and Dr Line Matthiessen, Directorate-General for Research and Innovation, European Commission, sent their apologies.

The Committee adopted the agenda proposed by **Dr Claudia Stein**, Director, Division of Information, Evidence, Research and Innovation. Ms Olivia Biermann, Ms Ramona Ludolph, Ms Ryoko Takahashi and Ms Sarah Whithouse were elected as meeting rapporteurs. Ms Tarang Sharma served as rapporteur post-hoc.

A review of the members’ declarations of interest by the WHO Secretariat confirmed that there were no conflicts of interest.

Introductory remarks by the WHO Regional Director for Europe

Dr Jakab outlined developments in the work of WHO since the Committee’s seventh meeting, and underscored the importance for the Organization of the election of the new Director-General. The election of the Director-General from the Executive Board’s shortlist of three candidates will take place at the Seventieth World Health Assembly.

Global priorities

Global issue 1: health in the 2030 Agenda for Sustainable Development

The areas of social determinants of health, gender, equity and human rights are to merge into a new programme area entitled “stewardship towards the Sustainable Development Goals” (SDGs) within WHO’s Division of Noncommunicable Diseases and Promoting Health through the Life-course. Further work to develop a repository of tools for attaining the SDGs was proposed.

Global issue 2: health emergencies

The Executive Board discussed the proposed programme budget for 2018–2019, which will be presented to the Seventieth World Health Assembly for adoption. A budget increase will be proposed to fund the WHO Health Emergencies Programme. Support for the Programme is needed, in particular to build capacity at the country level and to draw up a roster of staff that could be deployed quickly to emergency situations.

Global issue 3: migration and health

Migration and health was a subject of complex discussions in the Executive Board. These discussions culminated in a decision to develop a global action plan for submission to the World Health Assembly in 2018. The Director-General requested the Regional Office's support on migration and health activities at the global level.

Global issue 4: environment and health

Environment and health has been confirmed as a priority area at both global and regional levels, and a key area for intersectoral action. WHO accreditation to the Green Climate Fund is being pursued. Preparations for the upcoming WHO European Ministerial Conference on Environment and Health in Ostrava, Czechia, are in their final stages. The outcome of the Ministerial Conference will be a milestone for the Region.

Global issue 5: resource mobilization

Regional directors expressed concern over the imbalance of funding between headquarters and WHO regions, and requested that the Director-General redistribute funds to remedy the situation. A working group is being set up to look into the recommendations of a recent study on resource mobilization, and work is ongoing to strengthen networks needed to achieve this.

Regional priorities

Regional issue 1: the 67th session of the WHO Regional Committee for Europe

Preparations for the 67th session of the Regional Committee are well underway. The Regional Director presented an overview of the proposed agenda for the session, which includes a briefing from the new Director-General, a detailed discussion on the development of a roadmap for attaining the SDGs, and an overview of the outcomes of the Sixth Ministerial Conference on Environment and Health.

The following technical items will also be discussed:

- building a sustainable health workforce;
- improving access to medicines;
- strengthening laboratory capacities for better health in the Region;
- implementing the programme budget for 2018–2019; and
- developing a partnership strategy for non-state actors.

Technical briefings will be held on positive outcomes for health at the country level, AMR, cross-border coordination for immunization, and big data.

Regional issue 2: other regional meetings

Recent activities in the Region included the high-level conference “Promoting intersectoral and

interagency action for health and well-being in the WHO European Region” and the Global Migration Meeting, the first WHO global meeting on the development of an organization-wide framework on health and migration. The Global Migration Meeting provided the basis for a document to be presented to the World Health Assembly in coordination with the International Organization for Migration (IOM) and the Office of the United Nations High Commissioner for Refugees (UNHCR).

Regional issue 3: work at the country level

A review of the work to establish the new geographically dispersed office in Turkey was undertaken. A country visit to Israel was conducted to discuss the possibility of setting up a new country office to facilitate work in the occupied territories and promote access to health services, given the security concerns.

EACHR discussion and recommendations

Participants agreed that environment and health should remain a priority for WHO. Industrial chemicals have been shown to have a significant impact on the immune system and could affect vaccine effectiveness. The effect of industrial chemicals on prenatal neurodevelopment is an important area for WHO to work on. The outcome of the Sixth Ministerial Conference on Environment and Health is particularly important from intersectoral and life-course perspectives.

With regard to the life-course approach, the Minsk Declaration (2), which emanated from the 2015 WHO European Ministerial Conference on the Life-course Approach in the Context of Health 2020, constitutes an important milestone. A policy paper on the life-course approach, as a follow-up to the Minsk Declaration, will be developed for presentation to the Regional Committee in 2018.

The SDGs are cross-cutting and encompass all other priorities. The targets and the links between them should be underscored as an important means of providing evidence for decision-makers taking context specificity into account. The elaboration of a roadmap towards achieving the SDGs will afford a unique opportunity in this regard. Environmental health is among the key indicators for monitoring within the SDG framework.

The United Nations Economic Commission for Europe (UNECE) convened the Regional Forum on Sustainable Development, which included a roundtable discussion on data and monitoring. Priority is being given to minimizing the reporting burden on Member States, and WHO is developing a joint monitoring framework to harmonize reporting related to Health 2020 (3), the SDGs and NCDs.

Resurgences in vaccine-preventable diseases are occurring in Europe, and vaccine availability remains low in some countries. In Romania, for example, a measles outbreak is ongoing. The Government has committed to bridging vaccination gaps, in particular for mobile populations, and is working closely with a team from the Regional Office.

In central Asian countries, HIV and tuberculosis (TB) remain major priorities requiring intersectoral coordination and research. More research is also required into the over- and misuse of medicines, especially antibiotics. Awareness-raising measures for physicians are needed, and this requires the prioritization of research at the level of primary health care. Support from other Member States with experience in central Asian countries would be useful.

A discussion on value-based health care is key, especially in relation to the engagement of citizens and the public. A position paper taking into account both technical and patient perspectives could be developed.

The law passed by the Government of Hungary on the closure of the Central European University in Budapest, a leading institution in health research, is cause for concern. If closed down, it is likely that the University will continue its work in a different location.

Action points

- WHO to consider the impacts of environmental toxicants throughout the life-course.
- WHO to consider the scoring options for SDG targets and indicators, which should include environment and health, and finalize the joint monitoring framework and a set of core indicators accordingly.
- The EACHR to discuss value-based health care and consider developing a position paper.
- WHO and the EACHR to prioritize primary health care as a research topic.

Review of the implementation status of previous EACHR recommendations

Dr Stein presented and reviewed the action points agreed at the previous EACHR meeting (in 2016).

Public health and migration

All agreed actions were completed. The Strategy and action plan for refugee and migrant health in the WHO European Region (4) was adopted at the 66th session of the Regional Committee. A knowledge hub was set up to support Member States and as a platform for countries and institutions to exchange information and experience. A dedicated issue of *Public Health Panorama* was published (5) and Health Evidence Network (HEN) reports on migration and health (6) were also issued.

CCH

The work of the expert group on CCH is advancing, and several publications on culture and health have been issued, including a dedicated issue of *Public Health Panorama* (7).

Prevention and control of NCDs

The WHO Secretariat is working to promote research for the selection and prioritization of policies and programmes for NCD prevention and control. Early childhood indicators and targets have been developed.

Operational plan to take forward the Global strategy for women's, children's and adolescents' health

All actions under the operational plan to take forward the Global strategy for women's, children's and adolescents' health (8) were implemented. The EACHR is promoting research on gender bias. The region's Action plan for sexual and reproductive health (9) was adopted at the 66th session of the Regional Committee, and together the WHO Secretariat and the EACHR identified targets and indicators to emphasize women's health challenges through the life-course.

Draft global plan of action on violence

All agreed actions were completed. The Global plan of action to strengthen the role of the health system within a national multisectoral response to address interpersonal violence, particularly against women and girls, and against children (10) was adopted by the World Health Assembly.

DOHaD and the life-course

Work on the agreed actions is ongoing. The Secretariat is preparing a proposal on how the EACHR could focus further on DOHaD. The EACHR will contribute to the publication being prepared on DOHaD, from evidence to policy and action.

EACHR subgroup on evidence-informed policy-making

The agreed actions have either been completed or are ongoing. A dedicated issue of *Public Health Panorama* (11) was published and the Action plan to strengthen the use of evidence, information and research for policy-making in the WHO European Region (12) was adopted at the 66th session of the Regional Committee.

European Health Information Initiative (EHII)

All work on health information, evidence and research took place under the auspices of the EHII, a multipartner network providing coordination and guidance for health information activities in the Region. Seven Steering Group meetings have been held to date. The EHII currently comprises 33 members, primarily WHO Member States and other key stakeholders.

European framework for action on integrated health services delivery

The European framework for action on integrated health services delivery (13) was adopted at the 66th session of the Regional Committee, and the publication *Lessons from transforming health services delivery: compendium of initiatives in the WHO European Region* (14) was disseminated among all EACHR members.

Development of action plans for health sector responses to HIV and viral hepatitis in the WHO European Region 2016–2021

The action plans for the health sector response to HIV (15) and viral hepatitis (16) in the Region were adopted at the 66th session of the Regional Committee and are now being implemented.

EACHR discussion and recommendations

The Committee underscored the importance of continuing work on DOHaD. Participants questioned whether the WHO guidelines on breastfeeding should be revised with further consideration of how to promote and protect breastfeeding more effectively. The Regional Director confirmed that there has been no change in WHO's position on breastfeeding. If there were evidence to support a change in stance, this would be presented to WHO headquarters and taken up at the global level. It was noted, however, that while the WHO guidelines on breastfeeding are very clear, the debate is ongoing.

European Member States are committed to taking a more evidence-informed approach to policy-making. The adoption of the Action plan to strengthen the use of evidence, information and research for policy-making in the WHO European Region (12) is testament to that commitment. Trust in experts is waning, and post-truth politics provide fertile ground for anti-vaccination

campaigns. Fragmented research and information systems lead to protracted delays between the completion of research and its integration into policy-making.

The Regional Office's efforts to promote an evidence-informed approach by strengthening health information and research systems and endorsing studies showcasing good practices are, however, reshaping the narrative around vaccination. Examples of countries with well developed systems-thinking approaches and more comprehensive use of health information and evidence would be welcome.

The expert group on CCH is developing a toolkit on integrating CCH into policy-making. The WHO Collaborating Centre on Culture and Health at the University of Exeter, United Kingdom, is now established, and its work will be integrated into work on health information, evidence and research.

Linking work on CCH with the Strategy and action plan for refugee and migrant health (4) is key, as these two issues are closely related. Studies of health services for refugees have shown that access to quality, culturally sensitive care is lacking. Large migration flows into the Region from countries with high HIV prevalence could result in migrants living with HIV who are excluded from the health system in transit or destination countries contributing to transmission in the Region.

In the western part of the Region, 20% of new HIV cases are recorded among men who have sex with men. Antiretroviral coverage is high, but late diagnosis is problematic. In the central part of the Region, transmission is low and the increase in the number of cases tends to be small. Eastern European countries account for 80% of new cases in the Region, with particularly high prevalence in the Russian Federation and Ukraine, mostly driven by injecting drug users. Antiretroviral coverage in that part of the Region only amounts to around 20%. While migration from outside the Region is not viewed as a significant risk for HIV transmission, migration within the Region from countries with high prevalence could pose a threat.

Action points

- WHO to continue its work on DOHaD and the life-course.
- WHO to continue to integrate CCH into other strategic work throughout the Region.
- WHO to consider case studies and typologies of health information systems and systems thinking in the Region.

Big data and their potential use for health research

Presentation

Mr Clayton Hamilton, Unit Leader, eHealth and Innovation, described the Regional Office's work with big data, which is still in its early stages. Significant gaps have been identified in policy and regulation governing the use of big data in the health sector. Member States thus requested a technical briefing at the upcoming 67th session of the Regional Committee. The briefing will address key issues, enablers and barriers for big data adoption and application in the policy-making cycle.

Big data have been characterized by the so-called 5 Vs: volume, variety, velocity, veracity and value. While there are some examples of big data application in health across the Region, this is still limited. Stronger policies and legislation are needed to govern the use of big data in the health

sector; further research into the impact of big data on personal privacy, and supporting policies on the secondary use of health data, are required. For big data to become a public health research priority, competency in information and communications technology and data science, as well as access to data sources, will be needed. This poses difficulties. Computing power will also be required, and this has additional cost and maintenance implications. Ethical considerations are also important.

EACHR discussion and recommendations

Participants agreed that big data could be extremely powerful. More examples of the benefits of big data in the health sector and how it could be used to provide answers to specific problems would be useful. Big data that are already being applied in other sectors could also be applied in the health context, thus fostering intersectoral collaboration.

Big data on cross-boundary air pollution should be supported as a matter of priority. Linkages between health and environment databases could guide and inspire researchers. While big data are being used and sold by commercial actors, the public sector is taking time to consider definitions; as such, the public–private gap is widening.

WHO could play a role in explaining what constitutes big data and how to use them by sharing best practices from around the world. It could lead in regulating and seeking solutions to safeguard the appropriate use of big data, as well as in monitoring advances in the field. Opportunities should be identified to showcase how big data could underpin public health. Guidance should be developed on the necessary regulation to support smaller Member States in particular, and to establish the rules of play between those who produce big data and those who use it.

In order to better understand the potential uses of big data in public health, minimum requirements for databases should be established. Which public health problems could be best addressed using big data should also be determined. New techniques are required to process big data and establish their veracity.

Action points

- WHO to review good practices for using big data in policy and consider preparing related guidance.
- WHO to identify public health problems and priorities that can best be addressed by big data.
- WHO to issue guidance on the regulation of the relationship between producers and users of big data.
- WHO to integrate the conclusions of the Committee’s discussion into the technical briefing on big data to be held at the 67th session of the Regional Committee.
- WHO to establish an expert group to advise on the definition of big data, the 5 Vs and the translation of findings for policy-makers.

Ending childhood obesity: identifying research priorities

Presentation

Dr João Breda, Head, WHO European Office for the Prevention and Control of Noncommunicable Diseases, reported that only a few Member States in the Region are on track to meet 2025 Global Nutrition Target 4: no increase in childhood overweight (17). The multitude of factors contributing to childhood obesity remains a major challenge: the “eat less, move more” solution does not take account of the complexity of the phenomenon.

In terms of basic research, fundamental knowledge gaps remain with respect to: nutrition and early life programming of childhood obesity susceptibility; the attributable risk for NCDs resulting from childhood obesity; the role of macronutrients, micronutrients, bioactive compounds and nutrient interactions; and the role of physical activity and sedentary behaviour. Palatability and flavour preference, satiation, and the bidirectional links between food and children’s emotions also require further study.

Translational research is also required to understand dietary adequacy and quality, and to determine what constitutes a healthy diet for children. Consideration should be given to marketing and its regulation, in particular online marketing and the ethics and legality of big data analysis. Attention should be paid to how healthy food and drink environments are created, particularly through analyses of the food supply chain. Research should be conducted to determine the proportion of obesity attributable to socioeconomic inequalities, and the gains of healthy diet and physically active lifestyle should be promoted, particularly among vulnerable groups.

Gaps in surveillance persist, despite the expansion of the WHO European Childhood Obesity Surveillance Initiative.

EACHR discussion and recommendations

Participants underscored that fat in and of itself should not be viewed negatively, but rather saturated fat intake should be reduced as a proportion of total fat intake, and the combination of fat with sugar and salt should be avoided. Childhood obesity should be considered a societal issue, rather than one of individual behaviour. There is increasing evidence that being overweight is not only an issue of diet and exercise: obesogens affect metabolic rate, and certain chemicals and pollutants have been linked to weight gain among children.

Greater attention should be paid to variations and inequities between and within countries. The cultural contexts of obesity should be studied further and taken into account in measures to address childhood overweight. Excessive weight gain during pregnancy, and NCDs such as gestational diabetes, have also been found to contribute to overweight in children.

Commercial companies are using big data on individual behaviours. Diet measurement and the use of biomarkers show the associations between foods consumed and childhood obesity. Yet larger amounts of qualitative data and implementation research are needed for evidence-informed policy-making. Given the complex range of factors involved, consideration should be given to how to prioritize research areas.

A study of the relationship between trends in the determinants of obesity and the success of obesity interventions would be interesting. Natural experiments and country comparisons would

be useful, particularly since the etiology of childhood obesity is particularly complex. Consideration should be given to Member States' individual experiences, and whether these could be applied at the regional level. The transferability of interventions between contexts is important. The European Nudging Network could be engaged more systematically to influence the food industry.

The understanding of the role of fat in nutrition has evolved. New guidelines on fats are due to be issued, and the Committee's comments thereon would be welcome. With regard to CCH, significant research into Nordic and Mediterranean diets is ongoing.

Action points

- The EACHR to provide comments on the forthcoming dietary guidelines on fat intake.
- The EACHR to suggest alternative areas for research, other than diet and exercise.
- WHO to complete a HEN synthesis report on nutrition policies and interventions to reduce NCDs.
- WHO to link the work on CCH and the use of qualitative data with nutrition.
- WHO to continue to analyse natural experiments and establish country comparisons.

Vaccine-preventable diseases and immunization: the role of research in preventing outbreaks

Presentation

Mr Robb Butler, Programme Manager, Vaccine-preventable Diseases and Immunization, pointed to a wealth of ongoing research into vaccine-preventable diseases and immunization. In the Region, child mortality and the prevalence of vaccine-preventable diseases have been reduced remarkably over the past 40 years. Immunization programmes are generally strong, with high national coverage. Member States have committed to meeting the objectives of the European Vaccine Action Plan 2015–2020 (18).

Despite this commitment, resurgences of vaccine-preventable diseases are occurring, particularly in middle-income countries, which tend to pay the highest prices for vaccines. The introduction of new vaccines in those countries is generally uneven. This, along with vaccine hesitancy, has resulted in a situation wherein diseases that were previously prevalent mainly in children are increasingly affecting adults. Suboptimal monitoring and surveillance are compounding the issue.

Immunization should therefore be integrated with other health interventions. Sustainable access to vaccines and predictable funding are essential, particularly for middle-income countries. Vaccination equity should be emphasized; despite strong normative guidance on policies that could help to promote immunization, communities' needs and concerns are not adequately taken into account.

EACHR discussion and recommendations

Participants highlighted that the resurgence in some vaccine-preventable diseases might be due not only to gaps in immunization coverage, but also to reductions in vaccine effectiveness caused by immunotoxicants.

Vaccine hesitancy and scepticism seem to be more prevalent in Europe than elsewhere, and the considerable reduction in cases of certain vaccine-preventable diseases could lead to complacency among the population. A people-centred approach at the local level is therefore needed to maintain awareness of the dangers of vaccine-preventable diseases. A particular focus should be placed on addressing the vaccine-hesitant population, rather than on converting those staunchly opposed to vaccination.

The term “vaccine hesitancy”, however, suggests that responsibility lies entirely with the citizen, when in fact citizens are often underserved by the health system. Parents who have not been reached by awareness-raising and information campaigns, for example, may be hesitant about vaccinating their children.

Consideration should be given to how technological improvements to surveillance could be made, as more detailed data analysis could give insights into vaccination coverage gaps. Supply issues and their contribution to gaps in vaccine coverage have not been researched sufficiently. Vaccination programmes tend to be stronger when information systems are in place; many Member States do not have the capacity and tools to understand communities, and consumer retail data on vaccines is therefore lagging behind.

Action points

- WHO to raise awareness of the role of immunotoxicants in effective immunization.
- WHO to target outreach efforts towards those who are vaccine-hesitant, rather than anti-vaccine campaigners.

AMR and nosocomial infection: what are the research issues?

Presentation

Dr Danilo Lo Fo Wong, Programme Manager, Control of AMR, emphasized that AMR is a threat to public health and sustainable development. While it is gaining visibility on the international agenda, it must be addressed as a matter of urgency. The main driver of AMR is the misuse of antimicrobials stemming from unnecessary or inappropriate prescription, lack of testing to adjust treatment, self-medication and over-the-counter sales.

The Global action plan on antimicrobial resistance (19) contains five strategic objectives. Knowledge gaps persist in each area for action, and the research implications are manifold. Behavioural research is needed, and inventories of educational materials and good practices should be compiled. Diagnostic support tends to be underused, and there is a dearth of quality laboratory consumables. The drivers of resistance should be researched, and procurement procedures refined. Infection prevention and control programmes should be optimized, along with vaccination programmes, to bridge persistent implementation gaps.

Over-the-counter sales of antimicrobial medicines should be prohibited, treatment guidelines should be issued and antimicrobial stewardship offered. Research is needed to link local resistance patterns to treatment guidelines, and to assess the relationship between access to antimicrobials and their excessive use.

Lastly, the economic case for sustainable investment could be enhanced through economic impact assessments and new business models that delink investment from profit.

EACHR discussion and recommendations

Participants agreed that AMR is a crisis that must be addressed as quickly and thoroughly as possible through an innovative, coordinated, cross-sectoral One Health approach. Animal, human and environmental aspects must be taken into account, and the use of existing tools and evidence should be optimized. Variations in policies and approaches of different Member States should be mapped, and lessons drawn from them.

The cultural aspects of AMR should be taken into account through joint work with CCH experts. Behavioural research would also be useful to address phenomena such as “doctor shopping”, the practice of visiting multiple doctors to obtain a desired diagnosis or multiple prescriptions. Public awareness-raising is particularly important and consideration should be given to media campaigns to ensure that the correct message is sent to the public.

Attention must be paid to the loss of second-line antibiotics, particularly in African, central Asian and eastern European countries. Efforts are underway in the eastern part of the Region to address this. Awareness should also be raised of the dangers of affordable antibiotics becoming ineffective in countries where no alternatives are available.

A message is beginning to emerge from the basic science of AMR that, because parasitic bacteria transmit horizontally and vertically, AMR could also be viewed as a communicable disease.

Participants inquired about the implications of profit being delinked from investment; about whether health impact assessments are being conducted for AMR; and if there is any hope that opportunities to reverse resistance at the molecular level might be forthcoming. It was highlighted that companies do not tend to invest in activities that would yield little return on investment. Efforts are being made to establish public–private partnerships as a possible solution to this problem.

The One Health approach is essential, and WHO is collaborating on AMR issues with the Food and Agriculture Organization of the United Nations and the World Organisation for Animal Health. WHO does not have its own research facilities and therefore keeps abreast of academic research in order to impart information to Member States.

Garnering interest in slow-moving threats could be difficult. The issue of transmission is known and is being considered at all three levels of WHO. With regard to the AMR narrative, WHO uses the term “drug resistance” rather than “antimicrobial resistance” in its public information. Efforts are being made to change the media bias from instilling fear in the public to a more constructive approach. Political awareness, on the whole, remains low.

Action points

- WHO to adopt a whole-of-government approach to AMR.
- WHO to ensure that CCH are taken into consideration in the work on AMR.
- WHO to consider mapping policies to address AMR in the Region to study geographical variations in policy.

Implementation research

Introduction

Dr Stein briefed the Committee on the work of the Regional Office with regard to implementation research, in particular in relation to the Action plan to strengthen the use of evidence, information and research for policy-making in the WHO European Region (12). The Action plan is the only one of its kind at WHO, and emanated directly from the work of the EACHR. It was adopted unanimously, along with a resolution on fostering evidence-informed policy-making, at the 66th session of the Regional Committee.

The Action plan aims to strengthen national health information systems; establish and support health research systems; enhance country capacity to translate evidence into policy; and mainstream the use of research and evidence across Health 2020 implementation and other policy frameworks.

In adopting it, Member States committed to developing national strategies and plans of action, and to strengthening and funding national health research institutions. They also agreed to improve access to, and dissemination and implementation of, findings in public health care. The Regional Office will report back to Member States on progress, and will promote implementation research, health systems research and policy-informed research at the country level. An implementation plan is being prepared to ensure that WHO upholds its commitments and is held to account.

Presentations

Dr Janis Lazdins, Adviser to the Board, COHRED, presented the recently established Research Fairness Initiative, which functions on the precept that all countries need research and innovation systems to ensure health, equity and socioeconomic development. Since substantive national research and innovations capacity can take decades to develop, partnerships have become a basic mode of working. The optimization of research collaboration is therefore key, and requires an evidence base.

The Initiative was established to fill the gap in partnership regulation and to address inequities in partnerships, which are usually to the detriment of low-income country partners. Much literature has been published on this phenomenon, specifically on matters of intellectual property rights, data sharing, technology transfer, indirect costing and research contracts.

The Initiative's reporting framework was developed as a self-assessment tool for institutions to consider whether they would be an appropriate potential partner. Any type of organization, without restriction, can use the framework. It is based on three areas of fairness: fairness of opportunity; fair process; and fair sharing of benefits, costs and outcomes. The Initiative hopes that it will ultimately be used to develop best practices and guidelines for compliance. Initial evaluations and assessments have been completed and are due to be published soon.

Dr Piero Olliaro, Head, Intervention and Implementation Research, WHO Special Programme for Research and Training in Tropical Diseases (TDR), presented the work of TDR, which is hosted by WHO and funded by four agencies: the United Nations Children's Fund (UNICEF), the United Nations Development Programme, WHO and the World Bank.

TDR currently has some 100 projects ongoing in 50 countries, including: an initiative to build resilience to climate change in dryland systems in Africa; a visceral leishmaniasis elimination programme in the Indian subcontinent, conducted jointly with the governments of Bangladesh, India and Nepal; and a project on TB in West Africa, involving a network of 16 countries, investigating how to empower national TB control programmes to identify research gaps and to conduct and optimize research to meet the objectives of the End TB Strategy (20).

Work on understanding arbovirus outbreaks – in particular dengue – from a diagnostic perspective is ongoing. TDR is also assessing country outbreak preparedness through a consortium funded by the European Union. The consortium is looking at how to identify a dengue outbreak and intervene early, and considering how early warning systems for dengue could be applied to other arboviruses, such as chikungunya and Zika.

TDR encourages the use of research and programme data to inform policy and guide research funding decisions by identifying areas where support is needed. It is working to advance the science of social innovation for health, engaging communities in seeking solutions and encouraging local businesses to provide social benefits. It also supports efforts to strengthen research capacity in countries. In the Region, for example, regional training centres have been set up to overcome disparities in capacities between Member States. Several universities are also participating in the TDR post-graduate training scheme. New challenges include global security, epidemics, infectious diseases of epidemic potential and AMR.

Dr Etienne Langlois, Technical Officer, WHO Alliance for Health Policy and Systems Research, presented the work of the Alliance. It focuses on embedding implementation research into health policy and decision-making, and strengthening health systems in low- and middle-income countries, by considering how policy might affect and be affected by health systems. The Alliance supports knowledge generation and capacity-building, and builds partnerships to ensure that research is used by decision-makers. A platform housed by the Alliance has been established to support implementation research in low- and middle-income countries and to produce methods, tools and guidance, such as reporting standards, for implementation research.

Cognisant that more relevant implementation research and greater engagement with policy-makers are both needed, WHO published *Changing mindsets. Strategy on health policy and systems research* (21) in 2012. It calls for more fully embedding research in health systems and decision-making. Consequently, the Alliance developed the embedded implementation research approach, which is led by decision-makers at various levels in the health system with funding channelled to the decision-making body rather than a research institution.

The Alliance works closely with UNICEF and the GAVI Alliance to support decision-maker-led implementation research on maternal and child health, including immunization challenges. Collaboration with the regional offices for the Eastern Mediterranean and the Americas to improve programme implementation through embedded research is ongoing. Research papers highlighting lessons learned are being prepared.

The insights arising from embedded implementation research are bringing to light implementation barriers and critical health system dysfunctions. These must be overcome to improve research into complex issues surrounding universal health coverage and health equity.

Commentaries

Professor Göran Tomson, Senior Professor, International Health Systems Research, Karolinska Institute, Sweden, gave an overview of the work of the new European Tuberculosis Research Initiative. The Initiative has five objectives: to map ongoing and planned TB-related research activities; to develop and update regional research priorities; to facilitate collaboration among research institutions; to facilitate dissemination of research results; and to document funding gaps. He noted that funding tends to be channelled to the development of technology, while social innovation continues to lack support.

Participants welcomed the work being undertaken by COHRED. Partnerships remain an underdeveloped area in which equity and ethics issues persist. TDR has been a pioneer in building capacity and combining social innovation research with technology research. Embedding research in programme development is indeed the key to success. The platform established under the Alliance for Health Policy and Systems Research is an excellent example of implementation research. In the spirit of reciprocal learning, account should be taken of good examples of social innovation from low-income settings that could be useful to higher-income countries.

Professor Philippe Grandjean, Department of Environmental Medicine, University of Southern Denmark, initiated discussions on research strategies for environment and health. He emphasized that from the perspective of environment and health, acting to mitigate environmental hazards could significantly reduce the global burden of disease. Environmental research, however, tends to focus on just a few elements that are studied repeatedly. While reliable research is essential, a balance must be struck with innovation. Emerging hazards are often not studied sufficiently, despite there being a good understanding of their prevalence. Research priorities for environmental health are not established systematically, due to the push and pull between policy and science.

The fact that policy-makers are being told that environmental hazards account for 5.18% of the global burden of disease, while WHO estimates that they account for 25–30%, cannot be ignored. That difference in estimates persists through a lack of knowledge on how to document the necessary policy measures for implementation.

EACHR discussion and recommendations

Participants noted that the creation of strong, resilient health systems requires the exchange of best practices, which has cultural as well as technical implications.

Implementation gaps should be identified, as should leaders trained to take up implementation research. Collaboration with ministries of science and research is particularly important. An interdisciplinary approach is required, with research studies becoming part of monitoring and evaluation. The Regional Office could produce a toolkit in that regard. Funding is a major issue for implementation research. Given that knowledge should be used as well as produced, it would be interesting to know whether the results of existing implementation research could be extrapolated to other countries' circumstances.

Limits in the scope of application of implementation research could act as a barrier to funding, which must be overcome. Efforts should be made to draw the attention of major donors, such as the Bill & Melinda Gates Foundation, Horizon 2020 and development agencies, to the value and

benefits of implementation research. WHO could play a key role in disseminating information in that regard, including through the publication of a dedicated issue of *Public Health Panorama*.

WHO should take the lead in promoting social innovation, which is often lacking on research agendas – particularly that of the European Union – despite the presence of other innovation initiatives. The Regional Office could back up its programme activities with implementation studies in order to empower the concrete use of evidence and research knowledge. Low-income countries have good initiatives to share with regard to migrant health that could be usefully taken up in higher-income countries.

EACHR members, as ambassadors for research, could advocate for implementation research. Information on implementation research is often available in English only, and therefore inaccessible to those in the eastern part of the Region whose working language is Russian. Operational research experience exists in central Asian countries, but the inability to produce this information in English, and different traditions and attitudes towards contemporary research, render that knowledge unavailable to the rest of the Region. By translating the work of initiatives such as COHRED and TDR into Russian, their sphere of impact could be expanded.

The Regional Office is cooperating with TDR in the eastern part of the Region, where operational capacity for research is low. While there is much enthusiasm about the potential of the Structured Operational Research and Training Initiative, there is a lack of funding to participate fully.

It would be useful to find out what institutions in the Region are doing with regard to implementation research, and to understand the institutional incentives in decision-making. Consideration is needed to identify which tools or recommendations should become policy, how these policies would function in practice, and what their impact would be.

Implementation research requires a multipartner, multitasking approach, and its success depends on the context in which it is conducted. Each country has its own specific social, political and economic environment, and therefore comprehensive, cross-system interaction and strong alliances among participants are needed to ensure success.

Action points

- The EACHR to establish a subcommittee on implementation research, with terms of reference to be developed and membership selected from Committee members whose terms on the EACHR continue at least into 2018.
- WHO to promote social innovation on the European Union research agenda.
- WHO to publish a dedicated issue of *Public Health Panorama* on implementation research.
- WHO to back up programme activities with implementation studies.
- WHO to design a toolkit for the incorporation of implementation studies into monitoring and evaluation.

Update: third meeting of the expert group on CCH

Presentation

Dr Nils Fietje, Research Officer, Division of Information, Evidence, Research and Innovation, presented the work of the Evidence for Health and Well-being in Context project, and described its two components: enhancing Health 2020 monitoring and reporting, and CCH. Outputs for 2017–

2018 include HEN reports on cultural mediators, the cultural contexts of waste management, and measuring and reporting on community resilience and empowerment, as well as a policy brief on the health benefits of traditional diets and a country-level well-being report based on quantitative and qualitative evidence. A workshop will be held in Czechia on the cultural drivers of mental health reform.

The expert group on enhancing Health 2020 monitoring and reporting discussed the further development of subjective well-being indicators. It is considering innovative ways to measure empowerment and resilience, which have proven difficult to quantify. Funding has been received, which will facilitate the commissioning of research studies in this area. Financial support has also been received to enhance public health policy-making from a cultural perspective. Several publications were issued and a meeting of the expert group on CCH was held in collaboration with the United Nations Educational, Scientific and Cultural Organization in Paris, France.

The health benefits of cultural participation are being explored, and efforts are being made to determine whether sufficient evidence exists to issue recommendations on the benefits of music therapy in palliative care, especially for dementia patients. The group also discussed a draft toolkit on cultural competency and diversity sensitivity in migrant health, and a draft concept paper designed to elaborate a conceptual model for a CCH approach and apply this to the challenge of AMR.

EACHR discussion and recommendations

The Committee was informed about the meeting of the expert group on CCH, and in particular the discussion on AMR, which was presented as a potential case study. The key lesson learned from the discussion was that culture should be viewed as an enabler, rather than just a barrier. Culture should also be considered from a governance perspective, and particular attention should be paid to the cultural aspects of self-medication. The work will be taken forward with the support of the WHO Collaborating Centre on Culture and Health. This constitutes a step towards addressing a subject that other institutions still consider an impossible task.

The CCH project could focus on mental health, as this is a key challenge that should be viewed through a CCH lens. Well-being is also a key consideration in the mental health context, and culture should indeed be viewed as a positive contributor, not a barrier, in that regard.

Action point

- WHO to take up mental health for consideration from the perspective of CCH.

Update: migration and health

Presentation

Professor Walter Ricciardi, President, Italian National Institute of Health, stated that migration will be a long-term challenge that can only be addressed in a spirit of solidarity. Over the past 12 months, Italian nongovernmental organizations have saved the lives of some 200 000 people and, with the support of the Regional Office, have ensured that all of these people received essential vaccines.

The Regional Office's public health and migration programme is based on four pillars: technical support; health information and evidence; information-sharing and communication; and policy development. WHO produced a toolkit for assessing health system capacity to manage large influxes of refugees, asylum-seekers and migrants (22). Policy briefs and technical guidance were published on a variety of related issues, including mental health and psychosocial support.

Regarding advocacy and communication, a webpage was set up on migration and health (23), a quarterly newsletter is being produced in cooperation with the University of Pécs, Hungary, and several policy briefs and infographics were issued to raise awareness of various health aspects of migration. WHO focuses on four areas for policy development: reducing mortality and morbidity; minimizing the negative impacts of migration; avoiding disparities in health status and access; and guaranteeing the health rights of refugees and migrants. These are in line with both Health 2020 (3) and the 2030 Agenda for Sustainable Development (1).

Dr Santino Severoni, Coordinator, Public Health and Migration, noted that the adoption of the Strategy and action plan for refugee and migrant health in the WHO European Region (4) was achieved thanks to the advice and guidance of the EACHR and its subgroup on migration. The Region's strategy will serve as a model for the development of a global strategy.

The Regional Office contributed to the process for developing the two global compacts on migration and refugees. It is the only WHO regional office currently working on migration and health, and is taking into account the experiences of all 53 Member States. Findings are being published in English and Russian.

HEN reports were published on: migration, health and immunization; TB control and care among refugees; and violence and injury (6). WHO is engaging in research, including a joint study with the University of Copenhagen, Denmark, on best practices of health systems in response to migration and health needs. The Public Health Aspects of Migration in Europe project was renewed for a further three years, and will be used to provide technical support to Member States based on the collection of up-to-date evidence.

The Regional Office established the European Knowledge Hub on Health and Migration in collaboration with the UNHCR and the IOM, both of which are contributing to the first European report on the health of migrants. It also launched the Migration and Health Knowledge Management project, funded by the European Commission, through which summits will be held for high-level policy-makers. It is organizing webinars and developing technical guidance for sharing information on a range of NCD-related issues affecting migrants, and establishing a virtual library. EACHR guidance was sought on the prioritization of research topics and activities.

EACHR discussion and recommendations

Participants commended the Regional Office for its leading role in responding to the health needs of migrants in a spirit of solidarity and of upholding values. Migrants are marginalized, in low-income situations, and at times affected by diseases for which medications are not registered or available in Europe. Steps should be taken to ensure that these migrants are able to access the treatment and care they need. NCDs and health literacy should be included on the research agenda, since migrants are often susceptible to the social determinants of NCDs. The work on migration and health is an example of the interconnections between research, policy and politics.

Greece received European Commission funding for research projects and produced excellent work, in particular on access to immunization among migrants. Reporting of migrants' experiences of health in Greece remains limited, however, and the research has not been translated into policy. Thought is being given to how to engage with the diaspora of Greek researchers in universities around the world.

The issue of tropical diseases will be raised in discussions with the European Commission. Ongoing work on migration and health relates not only to communicable diseases; ways to provide technical and operative guidance to Member States on NCDs among migrants are also being sought.

Mental health: identifying research priorities

Presentation

Dr Daniel Chisholm, Programme Manager, Mental Health, stated that mental health is a development issue as well as a public health issue. Mental illness not only leads to impaired functioning, comorbidities and health issues for family members, but also results in substantial economic loss. It is estimated that US\$ 1 trillion per year is lost through missed workdays due to depression and anxiety. Mental illness is also strongly associated with poverty, economic downturn and unemployment. Disasters, disease outbreaks, communal violence, conflict and forced migration all have a high risk of impacting the mental health of exposed populations.

Determinants of mental health are linked across the life-course to individual attributes, social circumstances and environmental factors. Research into the key strategies for promoting and protecting mental health has shown that specific population groups should be targeted at specific points in the life-course at individual, social and environmental levels.

Although the research agenda ought to align with strategies to assess known risks to mental health, the majority of research funding and effort still tends to be directed to biological and clinical psychiatry. Robust evidence to advance policy dialogue and improve the promotion and protection of mental health is lacking, particularly in low- and middle-income countries. To achieve SDG target 3.4 on reducing premature mortality, mental well-being will need to be promoted through a variety of platforms, including schools and workplaces, and should be viewed from the perspectives of sustainable social and economic development and health.

Research prioritization exercises brought to light five suggested research priorities:

- mental health risks and determinants over the life-course, with particular focus on vulnerable groups, such as migrants and people living in poverty;
- mitigating those risks through anti-stigma measures, early identification, life-skill enhancement, resilience training and suicide prevention;
- health systems and implementation research to enhance access to and scale up community-based mental health services and overcome health systems barriers, including considerations of how to deinstitutionalize mental illness;
- health services and clinical research to address comorbidities and premature mortality, including risk factors for NCDs; and
- public health research to demonstrate costs, impact and value for money of innovative and existing evidence-based care and prevention, such as how to introduce step-care

approaches to the identification and management of mental health disorders, and the development of electronic health technologies.

EACHR discussion and recommendations

The Committee welcomed the efforts to link DOHaD research with mental health. Examples of studies in this regard include research showing the differences in DNA in the hippocampus of individuals who committed suicide and those who died in road traffic accidents. Research has also been conducted to show the links between fetal alcohol syndrome and delinquency, drug abuse and mental illness.

More work is needed to understand the volume and scope of mental ill health and to assess the proportion of people with mental illness who seek help. Attention should not only be paid to the medical dimension of mental illness, but also to the recovery and rehabilitation model, and the role of social work in particular. Social protection requires greater visibility. Consideration should also be given to the financial impact of comorbidities on the health-care system.

SDG target 3.4 should be considered from a mental health perspective in order to assess the policy and service implications of extra years of life lost to mental ill health.

Social media sites were criticized after Facebook published a paper on the posts to which users were exposed in order to influence their mood and mental health status (24). Although publication of findings ceased, data collection and analysis are doubtless ongoing. Consideration could be given to how to regulate and optimize the ethical use of these data in order to allow for prosecution when data are used unethically.

The epidemiological basis of estimates of the burden of mental ill health could be improved. No large-scale, cross-national epidemiological survey for estimating comparative rates of mental disorder has been undertaken recently in Europe. Nevertheless, there is sufficient evidence to make a solid case for investment. Challenges persist with regard to assessing help-seeking rates: the treatment gap is sizeable and rates of uptake are under-monitored. A technical report on comorbidities is currently being finalized, which addressed the links between mental disorders and major NCDs.

Action point

- WHO to continue its work on DOHaD and mental health.

Conclusions

Dr Stein thanked all participants on behalf of the Regional Director for their input, and assured the EACHR that due note had been taken of its recommendations for action. With regard to the agenda for the Committee's next meeting, an update on DOHaD will be included, big data will be a recurrent theme, and the CCH will be mainstreamed across all discussion topics. Other priorities will be set after the 67th session of the Regional Committee.

According to the General Rules and Procedures for the Selection of Experts and Proceedings of the EACHR, some experts are reaching the end of their mandates. Rotation of membership will be conducted gradually to ensure consistency and avoid loss of institutional knowledge. The appointment of new experts will take due account of gender and geographic balances.

EACHR recommendations

For future EACHR meetings, the Committee recommended that:

- more specific guidance should be provided on the anticipated outcomes of the Committee's session, to give a clear direction to discussions;
- lengthy presentations should be avoided, since they do not optimize the use of the Committee's time;
- the focus of presentations could be narrowed, and questions included to guide the Committee's discussions;
- responses to the Committee's comments could be better synthesized;
- more time could be devoted to the discussion of new items before the Committee, using the debate on implementation research as a model;
- participants could share their thoughts on how their approaches to the subjects on the agenda might have changed in light of the Committee's discussions;
- more substantive contributions could be made by other entities involved in research, in particular the European Commission and the European Centre for Disease Prevention and Control, to assess areas of work that are ongoing in cooperation, in competition and in parallel;
- more information could be provided on the Regional Office's work in-house, to give the Committee a better understanding of how the 2030 Agenda and Health 2020 are being implemented across programmes and divisions, and how cooperation is being promoted and silos avoided; and
- rather than focusing on updates on ongoing work, new topics that the Committee feels merit exploration by the Regional Office could be selected.

Closure of the meeting

The **Chair** thanked all participants for their active contributions, and the Secretariat for the successful conduct of the meeting, and declared the eighth meeting of the EACHR closed.

Summary of action points

Global and regional priorities
<ul style="list-style-type: none">➤ WHO to consider the impacts of environmental toxicants throughout the life-course.➤ WHO to consider the scoring options for SDG targets and indicators, which should include environment and health, and finalize the joint monitoring framework and a set of core indicators accordingly.➤ The EACHR to discuss value-based health care and consider developing a position paper.➤ WHO and the EACHR to prioritize primary health care as a research topic.
Previously agreed EACHR actions
<ul style="list-style-type: none">➤ WHO to continue its work on DOHaD and the life-course.➤ WHO to continue to integrate CCH into other strategic work throughout the Region.➤ WHO to consider case studies and typologies of health information systems and systems thinking in the Region.

Big data
<ul style="list-style-type: none"> ➤ WHO to review good practices of using big data in policy and consider preparing related guidance. ➤ WHO to identify public health problems and priorities that can best be addressed by big data. ➤ WHO to issue guidance on the regulation of the relationship between producers and users of big data. ➤ WHO to integrate the conclusions of the Committee’s discussion into the technical briefing on big data to be held at the 67th session of the Regional Committee. ➤ WHO to establish an expert group to advise on the definition of big data, the 5 Vs and the translation of findings for policy-makers.
Childhood obesity
<ul style="list-style-type: none"> ➤ The EACHR to provide comments on the forthcoming dietary guidelines on fat intake. ➤ The EACHR to suggest alternative areas for research, other than diet and exercise. ➤ WHO to complete a HEN synthesis report on nutrition policies and interventions to reduce NCDs. ➤ WHO to link the work on CCH and the use of qualitative data with nutrition. ➤ WHO to continue to analyse natural experiments and establish country comparisons.
Vaccine-preventable diseases and immunization
<ul style="list-style-type: none"> ➤ WHO to raise awareness of the role of immunotoxicants in effective immunization. ➤ WHO to target outreach efforts towards those who are vaccine-hesitant, rather than anti-vaccine campaigners.
AMR and nosocomial infection
<ul style="list-style-type: none"> ➤ WHO to adopt a whole-of-government approach to AMR. ➤ WHO to ensure that CCH are taken into consideration in the work on AMR. ➤ WHO to consider mapping policies to address AMR in the Region to study geographical variations in policy.
Implementation research
<ul style="list-style-type: none"> ➤ The EACHR to establish a subcommittee on implementation research, with terms of reference to be developed and membership selected from Committee members whose terms on the EACHR continue at least into 2018. ➤ WHO to promote social innovation on the European Union research agenda. ➤ WHO to publish a dedicated issue of <i>Public Health Panorama</i> on implementation research. ➤ WHO to back up programme activities with implementation studies. ➤ WHO to design a toolkit for the incorporation of implementation studies into monitoring and evaluation.
CCH
<ul style="list-style-type: none"> ➤ WHO to take up mental health for consideration from the perspective of CCH.
Mental health
<ul style="list-style-type: none"> ➤ WHO to continue its work on DOHaD and mental health.

References¹

1. Transforming our world: the 2030 Agenda for Sustainable Development. New York: United Nations; 2015 (http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E).
2. Minsk Declaration. A life-course approach in the context of Health 2020. Copenhagen: WHO Regional Office for Europe; 2015 (http://www.euro.who.int/_data/assets/pdf_file/0009/289962/The-Minsk-Declaration-EN-rev1.pdf).
3. Health 2020: a European policy framework and strategy for the 21st century. Copenhagen: WHO Regional Office for Europe; 2013 (http://www.euro.who.int/__data/assets/pdf_file/0011/199532/Health2020-Long.pdf?ua=1).
4. Strategy and action plan for refugee and migrant health in the WHO European Region (EUR/RC66/8). Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/__data/assets/pdf_file/0004/314725/66wd08e_MigrantHealthStrategyActionPlan_160424.pdf).
5. Public Health Panorama, Volume 2, Issue 4. Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/_data/assets/pdf_file/0003/330564/Panorama-Full-Volume2-Issue4-december-2016.pdf).
6. Migration and health. Health Evidence Network (HEN) synthesis reports [website]. Copenhagen: WHO Regional Office for Europe; 2017 (<http://www.euro.who.int/en/health-topics/health-determinants/migration-and-health/publications/health-evidence-network-hen-synthesis-reports>).
7. Public Health Panorama, Volume 3, Issue 1. Copenhagen: WHO Regional Office for Europe; 2017 (http://www.euro.who.int/_data/assets/pdf_file/0006/334365/Full-Volume3-Issue1-march-2017.pdf).
8. Global strategy for women's, children's and adolescents' health, 2016–2030. Geneva: World Health Organization; 2015 (<http://www.who.int/life-course/partners/global-strategy/ewec-globalstrategyreport-200915.pdf?ua=1>).
9. Action plan for sexual and reproductive health: towards achieving the 2030 Agenda for Sustainable Development in Europe – leaving no one behind. Copenhagen: WHO Regional Office for Europe; 2016 (<http://www.euro.who.int/en/health-topics/Life-stages/sexual-and-reproductive-health/publications/2016/action-plan-for-sexual-and-reproductive-health-towards-achieving-the-2030-agenda-for-sustainable-development-in-europe-leaving-no-one-behind-2016>).

¹ All electronic references accessed 18 June 2017.

10. Global plan of action to strengthen the role of the health system within a national multisectoral response to address interpersonal violence, in particular against women and girls, and against children. Geneva: World Health Organization; 2016
(<http://www.who.int/reproductivehealth/publications/violence/global-plan-of-action/en/>).
11. Public Health Panorama, Volume 2, Issue 3. Copenhagen: WHO Regional Office for Europe; 2016
(http://www.euro.who.int/__data/assets/pdf_file/0007/317608/Full-Volume2-Issue3-september-2016.pdf).
12. Action plan to strengthen the use of evidence, information and research for policy-making in the WHO European Region (EUR/RC66/12). Copenhagen: WHO Regional Office for Europe; 2016
(http://www.euro.who.int/__data/assets/pdf_file/0006/314727/66wd12e_EIPActionPlan_160528.pdf?ua=1).
13. The European framework for action on integrated health services delivery. Copenhagen: WHO Regional Office for Europe; 2016
(<http://www.euro.who.int/en/health-topics/Health-systems/health-services-delivery/publications/2016/the-european-framework-for-action-on-integrated-health-services-delivery-an-overview-2016>).
14. Lessons from transforming health services delivery: compendium of initiatives in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2016
(<http://www.euro.who.int/en/health-topics/Health-systems/health-services-delivery/publications/2016/lessons-from-transforming-health-services-delivery-compendium-of-initiatives-in-the-who-european-region-2016>).
15. Action plan for the health sector response to HIV in the WHO European Region (EUR/RC66/9). Copenhagen: WHO Regional Office for Europe; 2016
(<http://www.euro.who.int/en/about-us/governance/regional-committee-for-europe/66th-session/documentation/working-documents/eurrc669-action-plan-for-the-health-sector-response-to-hiv-in-the-who-european-region>).
16. Action plan for the health sector response to viral hepatitis in the WHO European Region (EUR/RC66/10). Copenhagen: WHO Regional Office for Europe; 2016
(<http://www.euro.who.int/en/about-us/governance/regional-committee-for-europe/66th-session/documentation/working-documents/eurrc6610-action-plan-for-the-health-sector-response-to-viral-hepatitis-in-the-who-european-region>).
17. Nutrition. Global targets 2025 [website]. Geneva: World Health Organization; 2017
(<http://www.who.int/nutrition/global-target-2025/en/>).
18. European Vaccine Action Plan 2015–2020. Copenhagen: WHO Regional Office for Europe; 2014
(http://www.euro.who.int/__data/assets/pdf_file/0007/255679/WHO_EVAP_UK_v30_WEBx.pdf).

19. Global action plan on antimicrobial resistance. Geneva: World Health Organization; 2015 (<http://www.who.int/antimicrobial-resistance/global-action-plan/en/>).
20. WHO End TB Strategy. Geneva: World Health Organization; 2014 (http://www.who.int/tb/post2015_strategy/en/).
21. Changing mindsets: strategy on health policy and systems research. Geneva: World Health Organization; 2012 (http://www.who.int/alliance-hpsr/alliancehpsr_changingmindsets_strategyhpsr.pdf).
22. WHO Regional Office for Europe, Office of the United Nations High Commissioner for Refugees, International Organization for Migration. Toolkit for assessing health system capacity to manage large influxes of refugees, asylum-seekers and migrants. Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/_data/assets/pdf_file/0018/325611/Toolkit-assessing-HS-capacity-manage-large-influxes-refugees-asylum-seekers-migrants.pdf?ua=1).
23. Migration and health [website]. Copenhagen: WHO Regional Office for Europe; 2017 (<http://www.euro.who.int/en/health-topics/health-determinants/migration-and-health>).
24. Kramer ADI, Guillory JE, Hancock JT. Experimental evidence of massive-scale emotional contagion through social networks. PNAS. 2014;111(24):8788–90. doi: 10.1073/pnas.1320040111.

Annex 1. Programme and agenda

Day 1 (Monday, 8 May)

OPENING, WELCOME AND INTRODUCTION (CHAIR)

INTRODUCTORY REMARKS, INCLUDING UPDATE ON GOVERNING BODIES' DECISIONS AND MAJOR EVENTS SINCE APRIL 2016 (ZSUZANNA JAKAB, WHO REGIONAL DIRECTOR FOR EUROPE)

DISCUSSION

SESSION 1: REVIEW OF THE IMPLEMENTATION OF ACTIONS FROM PREVIOUS MEETINGS OF THE EACHR IN THE CONTEXT OF OTHER RELEVANT REGIONAL ACTIVITIES (CLAUDIA STEIN)

Presentation by Secretariat

Discussion of the current status of activities

SESSION 2: BIG DATA AND THEIR POTENTIAL USE FOR HEALTH RESEARCH (CLAYTON HAMILTON)

Presentation on key issues, concepts and research implications

Discussion of key research areas for Europe, gaps, and recommendations by the EACHR

LUNCH (hosted by the Regional Director)

SESSION 3: ENDING CHILDHOOD OBESITY: IDENTIFYING RESEARCH PRIORITIES (JOÃO BREDIA VIA WEBEX FROM MOSCOW)

Presentation on key issues, concepts and research implications

Discussion of key research areas for Europe, gaps, and recommendations by the EACHR

SESSION 4: VACCINE-PREVENTABLE DISEASES AND IMMUNIZATION: THE ROLE OF RESEARCH IN PREVENTING OUTBREAKS (ROBB BUTLER)

Presentation on key issues, concepts and research implications

Discussion of key research areas for Europe, gaps, and recommendations by the EACHR

HEALTH BREAK

SESSION 5: AMR AND NOSOCOMIAL INFECTION – WHAT ARE THE RESEARCH ISSUES? (DANILO LO FO WONG)

Presentation on key issues, concepts and research implications

Discussion of key research areas for Europe, gaps, and recommendations by the EACHR

CLOSE OF DAY

DINNER (hosted by Division of Information, Evidence, Research and Innovation)

Day 2 (Tuesday, 9 May)

SUMMARY OF DAY 1 (RAPPORTEUR)

SESSION 6: IMPLEMENTATION RESEARCH

Presentations on key issues, concepts and research implications

1. WHO REGIONAL OFFICE FOR EUROPE'S ACTION PLAN TO STRENGTHEN THE USE OF EVIDENCE, INFORMATION AND RESEARCH FOR POLICY-MAKING (TIM NGUYEN)
2. COUNCIL ON HEALTH RESEARCH FOR DEVELOPMENT (JANIS LAZDINS)
3. WHO SPECIAL PROGRAMME FOR RESEARCH AND TRAINING IN TROPICAL DISEASES (PIERO OLLIARO)
4. ALLIANCE FOR HEALTH POLICY AND SYSTEMS RESEARCH (ETIENNE LANGLOIS)

Commentaries

1. GÖRAN TOMSON: HOW CAN THE WHO EUROPEAN TUBERCULOSIS RESEARCH INITIATIVE BENEFIT FROM THIS?
2. PHILIPPE GRANDJEAN: WHAT ARE THE IMPLEMENTATION RESEARCH PRIORITIES FOR ENVIRONMENT AND HEALTH? A PUBLIC HEALTH PERSPECTIVE

Discussion of key research areas for Europe, gaps, and recommendations by the EACHR

SESSION 7: UPDATE FROM THE THIRD MEETING OF THE CULTURAL CONTEXTS OF HEALTH AND WELL-BEING EXPERT GROUP MEETING (NILS FIETJE VIA WEBEX)

Presentation on key issues, concepts and research implications

Discussion of key research areas for Europe, gaps, and recommendations by the EACHR

SESSION 8: UPDATE ON MIGRATION AND HEALTH: WORK OF THE REGIONAL OFFICE (WALTER RICCIARDI, SANTINO SEVERONI)

Presentation on key issues, concepts and research implications

Discussion of key research areas for Europe, gaps, and recommendations by the EACHR

LUNCH (hosted by the Regional Director)

SESSION 9: MENTAL HEALTH: IDENTIFYING RESEARCH PRIORITIES (DANIEL CHISHOLM)

Presentation on key issues, concepts and research implications

Discussion of key research areas for Europe, gaps, and recommendations by the EACHR

SESSION 10: REVIEW OF AGREEMENTS REACHED AND ACTION PLAN (RAPPORTEUR)

Discussion

- What are the concrete next steps and how does this relate to the action plan?
 - In light of the discussions, are revisions required?
 - Have actors been identified for all recommended actions?
 - What are the implications for the next face-to-face meeting?
 - Agenda items for next meeting
-

SESSION 11: REVIEW AND REFLECTIONS BY REGIONAL DIRECTOR

- Strategic implications of discussions
 - Next steps
-

Any other business

CLOSING REMARKS (CHAIR AND WHO SECRETARIAT)

CLOSE OF MEETING

Annex 2. List of participants

MEMBERS OF THE EUROPEAN ADVISORY COMMITTEE ON HEALTH RESEARCH

Professor Rozá Ádány (Vice-Chair)
Head of the Department of Preventive Medicine
Faculty of Public Health
University of Debrecen
26 Kassai Street
H-4028 Debrecen
Hungary

Professor Jose M. Antó Boqué
Scientific Director
ISGlobal (Barcelona Institute for Global Health)
Carrer Dr Aiguader, 88
E-08003 Barcelona
Spain

Professor Fernando Artalejo
Professor of Preventative Medicine and Public Health
School of Medicine Universidad Autonoma de Madrid
Arzobispo Morcillo S/N
Madrid 28029
Spain

Professor Helmut Brand
Professor of European Public Health
Department of International Health
Maastricht University
Maastricht 6200 MD
Netherlands

Professor Reinhard Burger
President (Ret.)
Robert Koch Institute
Nordufer 20
PO Box 65 02 61
13353 Berlin
Germany

Professor Philippe Grandjean
Professor of Environmental Medicine
Department of Environmental Medicine
University of Southern Denmark
J.B. Winslowsvej 17 A
DK-5000 Odense
Denmark

Professor Maksut Kulzhanov
Adviser to the Ministry of Health
63 Abylaykhan Ave.
Almaty 050000
Kazakhstan

Professor Catherine Law
Professor of Public Health and Epidemiology
University College London Institute of Child Health
30 Guilford Street
London WC1 N1EH
United Kingdom

Professor Ruta Jolanta Nadisauskiene
Head of the Department of Obstetrics and Gynaecology
Lithuanian University of Health Sciences
Eiveniu str. 2
50161 Kaunas
Lithuania

Professor José Pereira-Miguel
Director
Institute of Preventive Medicine and Public Health
Faculty of Medicine, University of Lisbon
Av. Professor Egas Moniz
1649-028 Lisbon
Portugal

Professor Walter Ricciardi
President
Italian National Institute of Health
Viale Regina Elena 299
I-00161 Rome
Italy

Professor Franco Sassi
Professor of International Health Policy and Economics
Imperial College Business School
London SW7 2AZ2
United Kingdom

Professor Göran Tomson
Senior Professor of International Health Systems Research
Karolinska Institute
Widerströmska, Tomtebodavägen 18A
SE-17177 Stockholm
Sweden

Professor James Whitworth
Professor of International Public Health
Department of Infectious Disease Epidemiology
London School of Hygiene and Tropical Medicine
Keppel Street
London WC1E 7HT
United Kingdom

OBSERVERS

Dr Janis Lazdins
Adviser
Council on Health Research for Development
1-5 Route des Morillons
Geneva 1211
Switzerland

Dr Jean-Claude Worms
Chief Executive
European Science Foundation
1, quai Lezay-Marnésia – BP 90015
67080 Strasbourg cedex
France

REPRESENTATIVE OF THE STANDING COMMITTEE OF THE REGIONAL COMMITTEE

Ms Eva Falcão
Director of International Relations
Directorate-General of Health
Alameda D. Afonso Henriques, 45
Lisbon 1049-005
Portugal

RAPPORTEUR

Ms Olivia Biermann
Consultant

Ms Sarah Whithouse
Freelance rapporteur

WORLD HEALTH ORGANIZATION REGIONAL OFFICE FOR EUROPE

Dr João Breda
Head
Integrated Prevention and Control of NCDs
Division of Noncommunicable Diseases and Promoting Health through the Life-Course

Ms Elizaveta Busygina
Publications Secretary
Division of Information, Evidence, Research and Innovation

Mr Robb Butler
Programme Manager
Vaccine-preventable Diseases and Immunization
Division of Communicable Diseases and Health Security

Dr Daniel Chisholm
Programme Manager
Mental Health
Division of Noncommunicable Diseases and Promoting Health through the Life-Course

Dr Nedret Emiroglu
Director
Division of Communicable Diseases and Health Security

Dr Nils Fietje
Research Officer
Division of Information, Evidence, Research and Innovation

Mr Clayton Hamilton
Unit Leader
eHealth and Innovation
Division of Information, Evidence, Research and Innovation

Dr Zsuzsanna Jakab
WHO Regional Director for Europe

Ms Tanja Kuchenmüller
Technical Officer
Knowledge Management, Evidence and Research for Policy-making
Division of Information, Evidence, Research and Innovation

Ms Ramona Ludolph
Junior Professional Officer
Knowledge Management, Evidence and Research for Policy-making
Division of Information, Evidence, Research and Innovation

Mr Tim Nguyen
Unit Leader
Knowledge Management, Evidence and Research for Policy-making
Division of Information, Evidence, Research and Innovation

Ms Dayna Pender
Intern
Knowledge Management, Evidence and Research for Policy-making
Division of Information, Evidence, Research and Innovation

Dr Santino Severoni
Coordinator
Public Health and Migration
Division of Policy and Governance for Health and Well-being

Ms Kalina Shtilianova
Programme Assistant
Knowledge Management, Evidence and Research for Policy-making
Division of Information, Evidence, Research and Innovation

Dr Claudia Stein
Director
Division of Information, Evidence, Research and Innovation

Ms Ryoko Takahashi
Technical Officer
Knowledge Management, Evidence and Research for Policy-making
Division of Information, Evidence, Research and Innovation

Dr Danilo Lo Fo Wong
Programme Manager
Control of Antimicrobial Resistance
Division of Communicable Diseases and Health Security

WORLD HEALTH ORGANIZATION HEADQUARTERS

Dr Etienne Langlois
Technical Officer
Alliance for Health Policy and Systems Research

Dr Piero Olliaro
Head
Intervention and Implementation Research
Special Programme for Research and Training in Tropical Diseases

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
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
The former Yugoslav Republic of Macedonia
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

Website: www.euro.who.int