Public health foresight in light of COVID-19

— Exercise carried out by EuroHealthNet members, led by EuroHealthNet and the Dutch National Institute for Public Health and the Environment (RIVM)

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1 Executive summary: recommendations for action

The COVID-19 pandemic caught the world unprepared and has changed the shape of public health – and of our lives – for the foreseeable future. A group of senior public health officials from national and regional public health agencies across Europe came together to discuss current developments, the interrelated complexities and implications for their work in the near and long-term future. This report reflects their insights into some of the most pressing societal challenges and trends for public health in the years ahead, adopting a broad definition of health which encompasses social and environmental factors.

Challenges considered include the rise in social and health inequalities, the increasing pressure on health systems, and negative impacts on population mental health. They reflect both direct as well as indirect impacts of the crisis on health, such as for instance unemployment and its pathways to ill-health. Climate change and (further) environmental degradation were highlighted as key long-term challenges. The exercise also included setting out opportunities, such as the fact that public health has been put in the spotlight and is at the centre of political agendas and public mindsets.

The group concluded that "building back better" from the pandemic could provide an opportunity to strengthen health promotion and disease prevention, to bring more sectors together around the topic of health, including mental health and to enable citizens to adopt healthier, more sustainable behaviours. The importance of community action and social cohesion during the pandemic also provides opportunities to boost local level initiatives and networks.

Over the next months and years, actions need to be taken to tackle the challenges at the root level, cushion the impacts of crisis and mitigation measures and encourage positive developments. Public health actors and agencies continue to have a pivotal role to ensuring a resilient, inclusive and sustainable recovery from the pandemic.

This foresight exercise led to a draft set of recommendations for how different actors can help bring this about. The recommendations were discussed and validated in a EuroHealthNet partnership workshop in November 2020 and reflect this exchange.

National and regional public health institutes

- Research, monitor and gather preferably international comparable data and evidence on the evolving pandemic and health equity impacts. Vulnerabilities to the pandemic have shifted and new vulnerabilities need to be identified. International frameworks and guidelines can be useful tools (for instance, WHO guidelines on measuring chronic fatigue, or examples from the EU Steering Group practice Portal).
- Encourage advocacy competencies and sustainable channels that bring evidence into policymaking, making use of the recognition of the importance of health promotion.
- Use Health and Equity Impact Assessments (HIA) systematically as a basis for effective policy and practice understanding and design across systems and sectors.
- Adopt a multisectoral approach to tackle aspects that put health systems under stress. Reinforcing teams with new profiles (such as behaviour change experts) can help to increase competencies and know-how across different sectors.
- Give urgent attention to significant changes to the social, economic and environmental determinants (SEEDs) and their impacts on health equity and mental wellbeing, including digitalisation, AI, globalisation, transport and new forms of employment such as teleworking and platform economies.
- Explore further the prospects of digitalisation and use of technology (e.g. telehealth and telemedicine) for improving health equity outcomes. Promote digital literacy as well as health literacy.
- Set up or improve cooperation with primary healthcare as well as with regions, cities and (within) local communities and (home) care services and develop sustainable structures for social cohesion, community networks, health promotion and disease prevention. Local public health teams are invaluable links with local primary healthcare.
- Build better international cooperation (with the WHO, ECDC and other agencies).
- Step up dedicated action on improving mental health, healthy ageing, child health and health equity, including through an asset approach. Institutes can for instance make health equity a cross-cutting issue which is considered across all initiatives.

Governments

- Adopt a multilevel 'Health in All Policies' approach, achieving UN Sustainable Development Goals, working across thematic areas and with EU, regional and local authorities. Issues are interrelated and factors such as climate change have impacts on health and future pandemics and need to be prioritised. This also includes measures for a sustainable economic recovery and solutions towards rising levels of precarious work and poverty. Iceland, Scotland and Wales are examples of governments seeking to deliver on economies of wellbeing.
- Ensure and clearly communicate to all a fully inclusive, caring response to the pandemic, ensuring that no population groups feel left behind. The pandemic and future crisis require both bio-medical as well as psycho-social measures to boost preparedness and response actions. Focusing on vulnerable groups can be an entry-point to develop strong psycho-social support.

Governments (cont.)

- Health (equity) impacts assessments (HIAs) of COVID-19 mitigation measures have been lacking and are important to undertake, consulting stakeholders and setting new directions, through a participatory and evidence-based approach.
- Act urgently on the delays within preventative and curative services and impacts on other, chronic health conditions and impacts of an overwhelmed health system and other public systems.
- Encourage and support community-level organisations and networks and empower citizens, for instance by fostering (digital) health literacy and organising citizen panels for policy input. Low-income communities should be a particular focus.
- Recognise the role of public health institutes to move beyond their traditional portfolio, enabling them to move beyond silos, policy areas and competencies, and involve them in communicating to the public.
- Undertake impact assessments of the privatisation of health care services, as this may increase health inequality.
- Consider the allocation and redistribution of healthcare resources to invest in health promotion and prevention and social care systems, to tackle health inequalities and enable healthy living patterns.

European Commission

- Provide leadership and guidance on key issues – such as on improving mental health as part of resilience and recovery measures – developing a *European Health Union* for cohesion and support for national and local authorities.
- Strengthen and apply programme support for cross-border whole of government, whole of society exchanges and collaboration to build health for all EU policies.
- Ensure coherent mechanisms at EU level to support those most affected by the pandemic and provide mechanisms to invest in health promotion and prevention.
- Apply governance mechanisms available in the European Semester, in the Multi-Annual Financial Framework and Next Generation EU Recovery Plan to build improved resilience and sustainability for health, wellbeing and equity, revised according to new evidence of needs arising from the consequences of the pandemic, and to implement the Green Deal, Digital transformation and European Pillar of Social Rights.
- Recognising the interconnected nature of health and the economy, bring forward further fiscal and regulatory measures to address economic activities in favour of an "economy of wellbeing", build skills for health and wellbeing, and address commercial determinants of health, all of which have been highlighted during the crisis.
- Strengthen EU infrastructures particularly ECDC, including through effective partnerships and knowledge-sharing with national and regional institutes for public health, health promotion, disease prevention and counterparts responsible at all levels for social, economic and environmental health determinants.

International agencies and organisations

- Build "glocal" learning and cooperation throughout UN agencies, including the WHO and OECD, and with national and regional partners beyond governments, to support universal implementation of the SDGs and "health and equity in all policies".
- Include closer cooperation with national, regional and local agencies for public health, health promotion and disease prevention and civil society bodies as well as a strengthening of UN networks. Innovative investments and digital tools can be used to connect and exchange, for instance enabling public health institutes to develop their workforce through training activities and programmes with the WHO.
- Increase connection with communities at local level, for instance using digital tools to enhance skills and competencies. Increase visibility and approachability of the WHO at a local level, as part of building the Public Health Coalition and non-state actor roles.
- Develop the European Programme of Work and global programmes of the WHO to prioritise tackling health inequalities within and between countries and to ensure effective balances, resources and cooperation between psycho-social and bio-medical components of health systems. Ensure that approaches to communicable and non-communicable diseases are integrated and equitably prioritised, within a comprehensive framework which countries can rely on to support initiatives.

EuroHealthNet

- Help enable cross-country collaboration and exchange of information and evidence, for instance sharing surveys and reports carried out by members, as well as examples of promising practices. Digital tools allow for more frequent and direct exchange of information.
- Make the case to the European Commission for a health-promoting inclusive response to the pandemic, which links health, social and environmental considerations, and for keeping health equity at the heart of crisis preparedness and management.
- Help member agencies advocate to governments at national level on the need to leave no one behind. Support national health networks by linking them internationally.

The pandemic has drawn attention to an interesting paradox. At the same time, it has highlighted the increasing interconnectedness of our world, but also shrunk our daily lives down to much smaller circles – to our families, neighbourhoods, and communities. These two aspects – the very global and the very local – are both crucial to "building back better". The recovery *must* happen at a global level and citizens must be empowered and involved locally. A "glocal" approach, in which localism and globalisation are jointly considered, would enable global actions to be tailored to the local level, and for individuals across all groups to become engaged and take ownership of solutions.

2 Introduction

2.1 Background

As the COVID-19 pandemic reached Europe, EuroHealthNet, the European Partnership for improving health equity and wellbeing, took fast action to support its partners in their vital work, and to adapt its own work to the new situation. As a crucial part of this, EuroHealthNet's Executive Board suggested for the partnership to engage in a visioning exercise, to unpick the complexity and analyse how public health and health inequalities may change in the coming period. This was approved by the EuroHealthNet General Council on 4 June 2020.

The National Institute for Public Health and the Environment of the Netherlands (RIVM), a partner of EuroHealthNet, agreed to lead this work together with EuroHealthNet. RIVM is experienced in foresight analysis and is carrying out a Dutch public health foresight study in light of COVID-19.

2.2 Aim

EuroHealthNet and its member organisations have important roles to play in the future of public health in Europe, as well as on the ground in their home countries. They monitor, analyse and act to protect and improve the health of the population. This foresight exercise aimed to understand and discuss some of the trends and challenges but also the potential opportunities that have arisen from the pandemic, to inform members' strategies and their work. It also sought to provide input for EuroHealthNet's strategy for the coming years and explore how the partnership can positively contribute to "building back better".

The exercise, and this report, also aims to be useful to the broader stakeholder community, working on or around public health at local, national and EU level.

2.3 Process and scope

Given the urgency and the need for digital exchanges, EuroHealthNet and RIVM adopted a modified foresight methodology, described in Section 3. This report is based on:

- The results of an online survey, which included 3 open questions on challenges/solutions, and 32 statements on trends in public health and health care. The survey is included in full in this report (Annex I). 19 representatives from EuroHealthNet member agencies responded (Annex II).
- A digital workshop, which brought together senior officials from EuroHealthNet member agencies to discuss some of the key results of the survey in small breakout groups. The workshop was held on 18 June and was attended by 18 participants from 8 European countries (Annex III). It ensured meaningful participation and time for in-depth exchange in an online setting.
- An online discussion on 10 November, which brought together 18 members of the EuroHealthNet Partnership from 9 European countries (Annex IV) to exchange and validate the draft recommendations, including how they could be operationalised.

3 Foresight methodology: a brief overview

Projecting into the future can be complex and subject to uncertainties. It is necessary to consider the current situation and trends, as well as how the situation may evolve in the coming years or decades. In addition to direct impacts of the pandemic, more indirect health impacts should also be accounted for, for example through socio-economic trends. This demands a holistic approach to fully depict possible trends, their interaction, and the possible health impacts they may have.

Usually, foresight exercises begin by broadly mapping the most important driving forces. These are further specified regarding their possible impact on health and their level of uncertainty. For example, the ageing of the population entails less uncertainty than economic growth or technological progress. These driving forces, including their uncertainty and possible impact on health, determine different possible futures.

Next to these possible futures, it can also be helpful to explicitly distinguish desirable futures. Some of these futures are more likely to come about than others. "Forecasts", for instance, reflect the most likely futures. Other scenarios are less likely. Amongst these possible futures, the "black swan" is a concept which describes very unlikely events with a major impact on society and public health – such as COVID-19.

The usual foresight set-up of identifying scenarios was not possible in this case due to a limitation regarding time and format (online). Instead, the EuroHealthNet-RIVM exercise took as a baseline that in the coming years societies will be confronted with key uncertainties, related to the virus itself, the economic situation, changes in technology, behaviours, poverty, geopolitics, demographics, etc. The exercise focused on better understanding these uncertainties, their consequences, and how to deal with them. Specifically, it sought to understand:

- What are the main societal challenges in the short and long term, for policymakers as well as society in general?
- What can we do about them? What policy strategies can be identified to set the direction of future actions?

The aim of the exercise is that of all foresight: to help us better prepare for what may come, shedding light on key uncertainties and trends, and supporting policymakers and society at large to better consider different measures and be able to intervene.

4 Key trends, challenges, opportunities and solutions

This section draws on the results of the Foresight Survey carried out amongst the EuroHealthNet partnership. 19 respondents across 11 European countries provided input to the survey. The survey in full as well as the list of respondents are available in Annex I and Annex II.

4.1 Key trends

In the survey, participants were asked to consider 32 statements about ongoing trends related to public health, health promotion, behavioural insights, and to note to what extent they agreed that these were important developments. The main conclusions are included below, grouped in different themes.
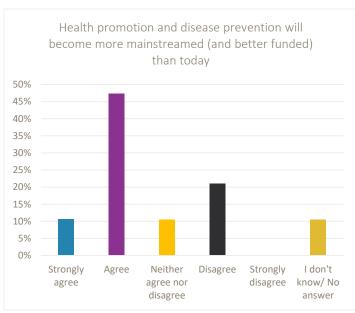
4.1.1 Health

All respondents foresee an increase in health inequalities in the coming 5 years.

Almost 90% expect COVID-19 to have serious negative impacts on population mental health.

4.1.2 Health systems, public health and health promotion

The majority of respondents anticipate that current levels of healthcare cannot be sustained due to ageing populations. Almost 90% of the respondents envisage healthcare expenditures to increase more than expected in the coming 5 years due to the pandemic. They are cautious about the increasing privatisation of health care provision, and concerned that it may not lead to more efficiency and long-term financial stability, but rather cause more health inequalities and create less general access and quality of health care.

Health promotion and disease prevention will become more mainstreamed (and better funded) than today

On the more positive side, over half of the respondents believe that health promotion and disease prevention will become more mainstreamed (and better funded) than today. The majority also assume that working in health promotion and disease prevention has become more attractive because of the pandemic. They furthermore think that collaboration in the field of public health will be more necessary than ever in the coming 5 years, and that public health should focus more on multimorbidity.
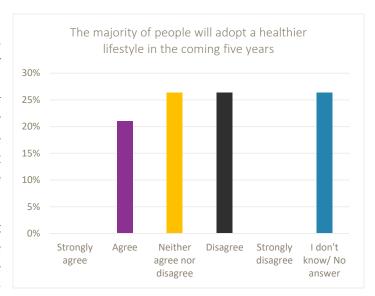
Respondents' views diverge regarding whether the European Commission will gain more competences than previously (over national governments) in the field of healthcare over the next five years.

4.1.3   Behavioural insights and sustainable development

In terms of insights into behavioural factors, almost 75% of respondents agree that Europe must profoundly change its ways of living, producing and consuming to stay healthy. Their expectations diverge however concerning the extent to which people will manage to do that and adopt healthier lifestyles in the coming five years.
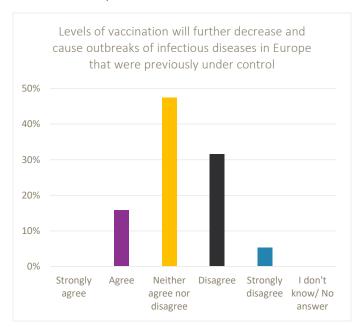
Over 70% of respondents believe that the number of people who are overweight will further increase in the coming five years, even though the

The majority of people will adopt a healthier lifestyle in the coming five years

majority agrees that the future will see positive developments such as more cyclists and cycling commuters due to improved cycling infrastructure.

Looking at the broader context, almost all participants (90%) agree that climate change will exacerbate future epidemics. Opinions diverge, however, regarding whether the crisis will have a negative effect on the achievement of the SDGs by 2030.

4.1.4   Development of broader COVID-19 situation

Levels of vaccination will further decrease and cause outbreaks of infectious diseases in Europe that were previously under control

There is less agreement amongst respondents about how the COVID-19 situation will develop. Diverging opinions were expressed about whether people will keep complying with government measures, whether physical distancing will become the new norm, and whether COVID-19 will have become like influenza within 3 years. Respondents' views also diverge on whether the provision of health care will ever be the same again. No consensus was reached about whether levels of vaccination will further decrease and cause outbreaks of infectious diseases in Europe that were previously under control.

Respondents do expect however a new recession soon, which will lead to new austerity measures, corroding social protection systems across Europe. Almost 85% of respondents foresee that the use of food banks will increase in the coming five years. Almost 60% find that too much attention
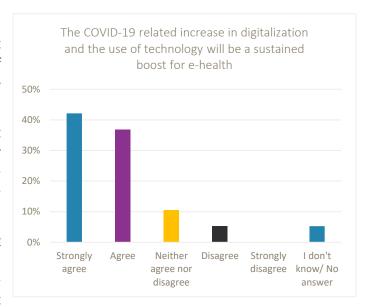
is being put on controlling COVID-19 as opposed to on other negative health impacts due to lockdown regulations.

4.1.5   Technological developments

Looking at the impact of technology, almost 80% of respondents believe that the increase in digitalization and use of technology due to COVID-19 will provide a sustained boost for e-health.

However, there is ambiguity about whether new innovations will allow for improved care for older people at home and within communities, reducing the need for care homes.

Over half of participants (58%) predict that digitalisation and the use of artificial intelligence will not manage to decrease (health) inequalities, which means that there are still doubts about the role of technology for equitable health outcomes. Promoting digital literacy as well as health literacy would be needed in order to maximise any positive technological changes and mitigate health inequalities and digital exclusion.

4.2   Key challenges, solutions and opportunities

The foresight survey also included three open questions. Respondents were asked to provide their top three short term challenges and top three solutions, their top three long term challenges and solutions, and top three positive developments. The section below draws on these answers. It provides a general overview of each question and highlights the frequency of responses.

4.2.1   Short term challenges (5-10 years) and solutions

Key short-term challenges highlighted by survey respondents focus on rising inequalities, and on the pressure put on our healthcare systems, as well as the knock-on effects of an overwhelmed health system on chronic health conditions such as cancer. Delayed preventative and curative treatments will impact needs, demands and health outcomes.

The need to better coordinate at European level, and the challenge of an ageing population, were also highlighted amongst key priorities. Respondents frequently mentioned the mental health and economic impacts of the pandemic.

Possible solutions focus on adopting an intersectoral approach, and strongly involving communities as well as citizens, with consistent and positive communication. Investing in research as well as in health promotion and prevention are highlighted as ways to tackle inequalities and

foster healthier living patterns, as well as promote mental health. The importance of fostering healthy ageing as well as focus on child health also feature. Respondents also suggested boosting health systems by investing in innovative ways to support the delivery of services.

#	Challenge	Frequency
1	Increasing health, social and environmental inequalities and inequities, impact of the pandemic on vulnerable groups	16
2	Maintaining regular healthcare (system resilience), and the rise of chronic diseases (including the unintended consequences of COVID-19 measures on health behaviours)	9
3	Addressing COVID-19 and preparing for future pandemics, including through vaccines and treatments, and a coordinated European response	8
4	Sustaining jobs and national economies, addressing the economic impact of the crisis and lockdowns	7
5	Increasing mental health issues (perceived anxiety, stress, sleep disorders, long-term PTSD effects, etc.), including amongst health professionals	6
6	Ageing	2
7	Funding for health promotion and disease prevention	2
8	Others, such as: digitalisation, increase in immigration and refugees, children not completing their studies	1 each
#	Solution	Frequency
1	Adopt an intersectoral Health in all Policies approach, working with stakeholders including community-based organisations and NGOs and associations that work directly with marginalised populations	11
2	Involve and empower citizens (social participation), including by increasing healthy literacy	8
3	Tackle health, social and environmental inequities and inequalities, for instance through improved monitoring and research, equitable access to healthcare, an equitable mental health response, and putting inequalities at the heart of policymaking	8
4	Invest in a health-promotion approach, including mental health promotion, encouraging and enabling healthy behaviours and living patterns	8
5	Set up economic mitigation measures to support incomes (including coherent mechanisms at EU level)	5
6	Invest in R&I and cross-country collaboration, to foster exchange and learning	4
7	Invest in public health services, including at primary health care level	4
8	Invest in child health, particularly those living in difficult situations, and support schools and pre-school environments to allow each child to develop to their full potential	3
9	Promote healthy ageing and intergenerational solidarity, and legislate against age discrimination	2
10	Other solutions, such as implementing strategies on food poverty and physical activity, advocating for upstream interventions such as taxation	1 each

	measures, preparing state and local systems to detect and respond to emerging infections (including through risk communication), and setting up a task force demonstrating the added value of Europe for citizens.	

4.2.2   Long term challenges (10-20 years) and solutions

Many of the long-term challenges are similar to those mentioned as short-term challenges, with the notable exception of the impact of climate and environmental change, which was the most frequently mentioned long-term challenge. Others include the need to increase the resilience of healthcare systems and prevent another health emergency, to build fairer societies, and to focus on health promotion and prevention.

Long-term solutions, too, cross-over with short-term solutions, with an emphasis again on the need for intersectoral planning and empowering people and communities. A few new solutions are the need to address the commercial determinants of health, and to invest in measures to tackle climate change, environmental resilience and green solutions. Respondents highlighted more frequently than in the short-term solutions the need to invest in children and to adopt a life-course approach to healthy ageing. This means investing in the first years of life, positive parenting, recognising public and inclusive education as an essential service to the community, initiatives to improve balancing of family and work life, child-friendly settings, working with a focus on future generations and intergenerational support.

Respondents mentioned the need for political commitment at the highest levels and maintaining public health leadership.

#	Challenge	Frequency
1	Climate change, the environmental emergency and environmental health (including the inequitable exposure to and negative outcomes of climate change)	11
2	Preventing another emergency and increasing resilience, as well as taking into account sustainability and the long-term impact (vs. short term thinking and management/politics)	8
3	Addressing social and health inequalities, preventing a social crisis and building fairer societies with more socially-oriented economies	7
4	Strengthening health promotion and prevention, including coordination and knowledge in the field of health promotion, and including the indirect impact of COVID on non-communicable diseases	6
5	Ageing population, including the parallel increase in the burden of chronic diseases, and addressing the issue of social care	5
6	The health and wellbeing of young people, including for instance health consequences of adverse childhood experiences	3
7	Addressing the wider determinants of health, especially the commercial determinants of ill health	2
8	Others, such as the safe circulation of goods and people, and the long-lasting negative health impacts of structural violence faced by migrants and refugees	1 each

#	Solution	Frequency
1	Engage in intersectoral planning, alliances, funding and action, and promotion of Health in All Policies	6
2	Support the empowerment of local communities through e.g. legislation, the development of networks, transparency and rapid communication, a "glocal" economy	5
3	Invest in early years, making the case for child health to tackle underlying inequalities and achieve a healthier and more sustainable society, including through initiatives to balance work and family life	5
4	Greater political commitment, including between countries, and at European level, promoting agreement beyond the political cycle (including by improving the cyclical evaluation of health equity in all policies through comprehensive health impact assessments)	5
5	Regulate economic activities (e.g., reinforcing advertising and marketing regulations, taxation measures building on the "economy of wellbeing")	4
6	Focus on environmental resilience, making it a priority for the public and private sector to achieve climate targets and the circular economy	4
7	Engage and empower citizens to take responsibility for their own health through a participatory approach (education, transparency, etc.)	3
8	Focus on improving the quality of life for older people through active ageing, taking a life-course approach to ageing, and promoting equality between generations	3
9	Invest in health promotion and prevention, including through financial incentives at EU level	2
10	Invest in and learn from research initiatives on these issues	2
11	Monitor health inequalities and non-communicable diseases, developing and implementing interventions directed towards whole populations and individuals at risk	2
12	Others, such as strengthening public health services, developing a consistent policy and strategy on physical activity and food poverty, fostering behaviour change for more sustainable practices, learning lessons from the COVID-19 response, establishing a new funding model for social care, promoting an EU Erasmus about social determinants of wellbeing and health in different sectors of society, and integrating mental health services as a key response to improving wellbeing	1 each

4.2.3   Positive developments and opportunities

Respondents highlighted the fact that during the pandemic, the public health sector, and the public sector more generally, have been put in the spotlight. While being prone to criticism, they see it also as an opportunity to further develop and enhance their role. The fact that local communities and support networks have been strengthened was also mentioned, as were some of the environmental benefits (cleaner air and reduced traffic).

Other opportunities mentioned by a few respondents include the increased use of telemedicine and telehealth, the enhanced visibility of existing inequalities and related public awareness, and increased cross-sectoral work and collaboration, including at a global level (scientific, but also between medical and social professionals, as well as policymakers). Respondents also highlighted the greater appreciation for Europe.

#	Positive developments	Frequency
1	Public health is at the centre of political agendas and public mindsets and seen as crucial to economies and societies (an investment rather than a cost). Public services are seen as key to ensure health and wellbeing, and public health institutions are more present (making the case for public health leadership). Public health is seen as a protective factor, both on individual and societal levels, and is more appreciated, understood and supported (it is a global health education opportunity, including on the importance of vaccination). People have realised that we need a strong public sector more generally, not left to market forces.	14
2	Enhanced local community action to support vulnerable populations, greater sense of community, social (and family) cohesion, social networks support, and community resilience.	8
3	Reduced pollution/better air quality, reduced travel/traffic/flights, more walking and cycling during the pandemic	7
4	Innovative new ways of working and business models, digital advances in schools and workplaces	5
5	Greater collaboration within the scientific community, and between medical and social professionals, as well as flexibility by professionals to do what is necessary	4
6	Increased awareness of existing (social) inequalities	2
7	Greater appreciation for Europe (many problems can only be solved together), including for European welfare	2
8	Increasing use of telemedicine, telehealth	2
9	Others, such as that the pause in service provision has allowed policy and service providers to consider significant reform in onward service models, the increased relevance of Health in All Policies and health promotion, the reinforcement of the social security net in France, increased cross-sector and global cooperation, and the fact that bold decisions were made by policymakers to protect public health.	1 each

5 Focus on four challenges and possible actions

In the summer of 2020, EuroHealthNet and RIVM organised a workshop bringing together 18 senior level representatives of EuroHealthNet and its member agencies, from 8 European countries (see Annex III). During the workshop, four breakout groups discussed in-depth four of the key challenges identified during the foresight survey: (1) health inequalities, (2) mental health, (3) ageing, and (4) the resilience of health systems. Workshop participants aimed to:
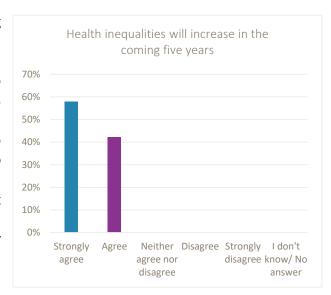
1) *Further describe the challenge, its driving factors, the main impacts of the pandemic: what has changed? who are the winners/losers?*
2) *Identify opportunities and possible actions: what can we do better/different? which actors can do which actions?*

The section below conveys the key points that emerged from the discussion.

5.1 Health inequalities

5.1.1 Challenges

- COVID-19 has exacerbated existing inequalities and created new ones, impacting different groups differently. What do we mean by "vulnerabilities" to the pandemic, and how do we address this?
- Protective factors (such as resilience) to deal with pandemic impacts are also unequally distributed.
- There are both direct and indirect effects on health (and mental health) on different groups, e.g., caused by prevention measures (unemployment, lockdown, isolation, violence, abuse).

Health inequalities will increase in the coming five years

5.1.2 Actions

Actions have been grouped into three broad themes. It is possible that the greater visibility of health inequalities to the wider public and politicians could provide additional impetus for delivering on them.

Developing research and understanding:

- Monitor health inequalities and integrate robust indicators of health inequalities and inequities into health surveillance data.

- Identify 'new' vulnerabilities and different vulnerable groups.
- Identify protective measures as well as community assets and their distribution across the social gradient.
- Consider how to ensure communication and information reaches these groups.

Linking research to policy to foster evidence-based policymaking:

- Public health professionals can support evidence-based policymaking by providing regular detailed data and evidence on health inequalities across different levels (local, regional, national, international) as well as being sensitive to additional forms of evidence (narratives, voices from people with 'lived experience').
- Studies and surveys need to be turned into policy briefs and concrete recommendations for policies and practices that 'cushion' impacts of the pandemic on vulnerable groups and enable the development of rapid and targeted (tailor made) strategies.
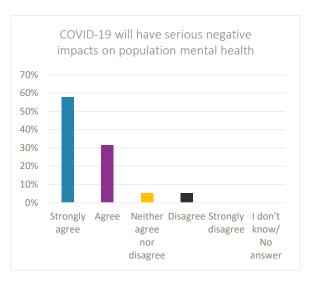
Strengthening community-level actions:

- Information and actions need to be efficiently spread and implemented from international, national to community level, as 'glocal' measures, addressing interrelated local and global problems.
- Involving community-level stakeholders systematically to reach specific groups. This can be achieved by building networks in communities to ensure that all groups are reached and measures are adequately distributed, for instance by using multipliers.
- For instance, information for migrant populations can be prepared at national levels and distributed and locally adapted through community centres. Local communities can also be effective in supporting different groups, for instance the elderly and children.

5.2   Mental health

5.2.1   Challenges

- The direct and indirect consequences of COVID-19 (including lockdown and economic downturn) have important impacts on mental wellbeing. These impacts are felt differently amongst different groups (disproportionate impact on critical workers, children and adolescents, women, and other vulnerable groups). How can we address this?
- Much is still unknown (e.g. psycho-social impact of teleworking), and there is likely to be a long-term impact – people are concerned for the future.

- Adequate mental health services that can respond to increasing demands are underfunded – what resources can we draw on during a recession?
- Physical distancing could be challenging, as mental health is built on interaction and group work. How to give direct support in these restrictive circumstances? What are the psycho-social effects of online sessions, telephone sessions or of mask wearing during face-to-face contacts?

COVID-19 will have serious negative impacts on population mental health

5.2.2 Actions

Developing research and understanding:

- Monitor and document the situation as it develops (for instance regarding teleworking, unemployment and underemployment), and generally the mental health impacts of COVID-19 and mitigation measures.
- Assess what (new) methods work and what are protective measures and factors, to further inform preventative actions.

Collaborating across countries and engaging in joint advocacy:

- Share evidence, ideas and learnings on improving mental health and wellbeing between countries, pooling understanding at European level.
- Raise awareness and advocate for improved mental health action, based on evidence.

Ensuring inclusivity:

- There is a risk of digital exclusion, particularly of older people. It is crucial to maintain face-to-face support services, phone calls, TV programmes, etc., rather than move completely online.
- Building capacity within health systems for translation and interpretation (e.g., of support using phonelines, online support) is crucial to provide support to migrants.
- Community-level initiatives help to increase solidarity and social cohesion.

Demonstrating leadership at national and EU level:

- National leaders need to communicate that they care about mental health as well as physical health and highlight their commitment to "leave no one behind".
- The European Commission should provide a common message on the need to also address health from a psycho-social perspective and highlighting the need for inclusivity. They can provide advice to national and regional authorities on measures such as surveys on mental health, phone services, community action, etc.
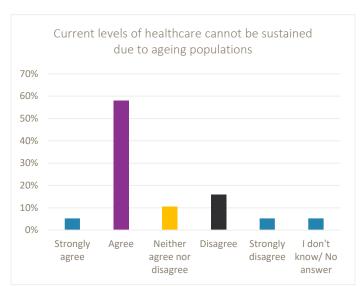
Allocating resources:

- Alongside surveys and awareness-raising, it is important for governments to commit resources and invest in mental health services, with a focus on defined vulnerable groups.

5.3 Ageing

5.3.1 Challenges

- The pandemic has given rise to new forms of stigmatisation, notably against older people.
- The demographic changes (and ageing in particular) are a significant challenge for the sustainability of health and care systems.
- Digitalisation is an important inequality dimension to consider. How to ensure that less digitally competent groups such as some older people (as well as lower educated/health illiterate) are not excluded?

Current levels of healthcare cannot be sustained due to ageing populations

- Care homes are no longer seen as a safe place. How can we ensure a safe, connected and meaningful life for elderly people?
- Ageing goes hand in hand with international solidarity as well as concerns for young people and children as part of a life course approach to ageing.

5.3.2 Actions

Ensuring a focus on frailty:

- Frailty (generally, and specifically for the elderly), should be more central in political agendas, better included in existing approaches, within and beyond health systems (including in transport, housing, public spaces, product safety) and allocated adequate resources.
- Care homes need to be better integrated in community health systems, including improved home care and support to informal carers.
- Prevention of frailty and multi-morbidity in old age should be addressed in dedicated healthy ageing strategies.

Engaging older people:

- Having an active role and engaging in society at all ages is a strong precursor for good health and wellbeing. We need to capitalise on truly involving our increasingly ageing population.

- Public health institutes should engage on a more regular basis with stakeholders and civil society representing older people.
- Day-cares at community level for older people could be reopened, to ensure that older people have the opportunity for mental and physical exercise.
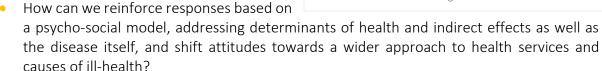
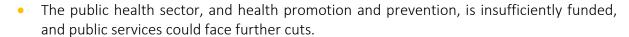**Promoting resilient local communities:**

- Local living environments are crucial to ensuring resilient societies. City administrations and communities need better access to resources to deal with interlinked health, social and environmental issues through a multisectoral approach.
- Gathering and monitoring local data and evidence is crucial to ensure tailored strategies and better understand how local settings pay a role in resilience, and to increase understanding and visibility of vulnerable groups, such as frail people, and social and environmental inequalities.

5.4 Resilience of health systems

5.4.1 Challenges

- The sudden threat of COVID-19 triggered an exceptional response from health systems. Due to the nature of the pandemic this response was inevitably based on a biomedical model of health, supporting health professionals, medical equipment, and treatments.
- The pandemic has had knock-on effects on routine medical care – we cannot afford to put healthcare systems in reduced capacity for a long period.
- How can we reinforce responses based on a psycho-social model, addressing determinants of health and indirect effects as well as the disease itself, and shift attitudes towards a wider approach to health services and causes of ill-health?
- The public health sector, and health promotion and prevention, is insufficiently funded, and public services could face further cuts.

Provision of healthcare will never be the same because of COVID-19

5.4.2 Actions

Ensuring health services adopt a more holistic model of health:

- The "biomedical" and "psycho-social" models of health need to be better integrated – health systems should be more attentive to the wider determinants of health and indirect consequences of the crisis and impacts on health. To do this, it is important to:
  - o Have data on the development of non-communicable diseases and social determinants of health and psycho-social impacts of the pandemic;

- o Advocate for solutions that tackle both the direct and indirect impacts.
- This change needs to happen amongst citizens too – health literacy as well as social prescribing could help citizens understand health in a more integrated way.

Investing in the social response as part of crisis preparedness:

- Crisis preparedness is about strong healthcare, strengthened public health competencies, as well as stronger social care systems, to 'cushion' the effects of the pandemic and mitigation measures. For example, providing support in cases of unemployment, as well as up-skilling/re-skilling. This benefits health and wellbeing in the long term.
- Often, people already facing disadvantages provided critical services during the lockdown and enabled our systems to keep functioning (people working for supermarkets, waste collection etc.), whilst being at higher risk of catching severe forms of COVID-19. We need to invest in these communities and their living environments, with positive impacts on their health and wellbeing.

Seizing the opportunity for a shift towards promotion and prevention through a multi-sectoral approach:

- The crisis is an opportunity to advocate about the importance of investing in prevention and promotion. Public awareness and existing prevention programmes are facilitators. Common surveys, cross-sectoral collaboration and advocacy could help further this.
- Public health institutions should play a greater role in fostering a multisectoral approach to tackle aspects that put our health systems in stress. They should link up more strongly with primary healthcare and GPs, who are closer to people and communities and have a strong link with prevention and promotion.
- Public health institutes have unique supportive positions towards policy makers as well as implementers. Heads of public health institutes need to be provided with concrete evidence on what works in health promotion and disease prevention, which they can feed to Health Ministers.

6 Conclusion and next steps

The EuroHealthNet-RIVM foresight exercise highlighted several key challenges that are likely to arise in the short and long term due to the COVID-19 pandemic, and identified some opportunities and ways in which different actors can take action to ensure more inclusive, resilient and sustainable public health, health care, and societies as a whole.

Some of the future challenges identified, such as health inequalities and concern for socially vulnerable groups, are not new but might be of growing concern in the coming years, given the impacts of the COVID-19 pandemic.

The need for internationally comparable data and evidence on the evolving situation is important to be able to compare and analyse health impacts in different European countries, to strengthen pan-European research and to stimulate evidence-informed policymaking.

This report will be widely disseminated amongst EuroHealthNet members and external stakeholders to inform their post-pandemic strategies, as well as inspire foresight studies they may themselves be carrying out at national or sub-national levels.

EuroHealthNet will draw on the final recommendations to advocate for health-promoting, inclusive and forward-looking health systems and societies.

The outcomes of this Foresight Exercise will be discussed by EuroHealthNet's Executive Board, who will decide on the next steps for the partnership as part of its new five-year strategy.

Annex I: Foresight Survey

Foresight of Public Health, in the light of COVID-19 - Survey

Introduction

This survey is part of the EuroHealthNet-RIVM foresight exercise, which aims to engage EuroHealthNet members in looking ahead to understand possible trends and challenges we are facing due to the COVID-19 pandemic. The exercise will also discuss some of the opportunities the current crisis has created, as well as ways in which the public health sector can positively contribute to "building back better".

The analysis of survey results will feed into a Foresight Workshop online organised on 18 June between 10:00 – 12:30 (CET). The Workshop will engage members in discussing the likely major public health trends in the short- and longer-term, envisaging different future scenarios and "solutions". Both the survey and workshop will feed into a report, which will be validated by a further online meeting in September.

Should you wish to take part in the Foresight Workshop on 18 June, kindly enter below your name, position and organisation. To ensure a meaningful discussion in an online setting, we are only able to accept 30 participants. We will aim for a balance of geographies and expertise. We will confirm your registration on 16 June. Please note that you are invited to complete the survey even if you are not able to take part in the workshop – your valuable input would be greatly appreciated.

Survey

This survey includes 3 open questions and 32 statements on ongoing challenges and trends in the field of public health and healthcare. It should take you maximum 20 minutes to complete.

Open questions

What are the main public health challenges in Europe in the short term (0-5 years), according to you? And what should be done about these challenges?

Please mention a maximum of 3 challenges.

What are the main public health challenges in Europe in the long term (10 - 20 years), according to you? And what should be done about these challenges?

Please mention a maximum of 3 challenges.

The coronavirus has also brought positive developments, namely...:

Please mention a maximum of 3 developments.

Statements
Below you will find 32 statements about ongoing trends. We would like to ask you to note to what extent you agree that these are important developments for the future of public health and health care in Europe.

You can choose between the following answers for each of the statements: Strongly agree – agree – neither agree nor disagree - disagree – strongly disagree – don't know

1. An upcoming recession will lead to new austerity measures corroding social protection systems across Europe.
2. Climate change will exacerbate future epidemics.
3. COVID-19 should be controlled (i.e. minimal hospital admissions and mortality), no matter the costs.
4. COVID-19 will have serious negative impacts on population mental health.
5. Current levels of health care cannot be sustained due to ageing populations
6. Digitalization and the use of artificial intelligence (AI) will decrease (health) inequalities.
7. Europe must profoundly change its ways of living, production and consumption to stay healthy in the future.
8. Health care expenditures will increase more than expected in the coming 5 years due to COVID-19
9. Health inequalities will increase in the coming 5 years.
10. Health promotion and disease prevention will become more mainstreamed (and better funded) than today.
11. In the coming 5 years, European collaboration in the field of public health will be more necessary than ever.
12. Increased multi-sector cooperation due to COVID-19 will remain the norm in tackling other health challenges.
13. Increasing privatization of health care provision will cause more health inequalities and create less general access and quality of health care.
14. Increasing privatization of health care provision will lead to more efficiency and long-term financial stability.
15. Levels of substance misuse such as alcohol, drugs and tobacco will go down among adolescents and young people.
16. Levels of vaccination will further decrease and cause outbreaks of infectious diseases in Europe that were previously under control.
17. New innovations will allow improved care for older people at home and within the community, reducing the need for rest homes.
18. People will stop complying with COVID-19 measures before the end of 2021.
19. Physical distancing will be the new norm in society, at least for the coming 5 years.
20. Provision of regular health care will never be the same because of COVID-19.
21. Public health should focus more on multimorbidity and less on single morbidity
22. The Coronavirus will be like influenza within 3 years.
23. The COVID-19 crisis will have a negative effect on the achievement of the SDGs by 2030.
24. The COVID-19-related increase in digitalization and the use of technology will be a sustained boost for e-health.
25. The European Commission will gain more competences than previously (over national governments) in the field of health over the next five years.
26. The future will see more cyclists and cycling commuters due to improved cycling infrastructure.

27. The majority of people will adopt a healthier lifestyle in the coming 5 years.
28. The number of people who are overweight will increase in the coming 5 years.
29. The use of foodbanks will increase in the next five years.
30. There will be a new global economic crisis in the coming 5 years.
31. Too much attention is being put on controlling COVID-19 instead of on other negative health impacts due to lock down regulations
32. Working in health promotion and disease prevention has become more attractive because of the corona crisis.

Annex II: Survey respondents

Name	Organisation	Position	Country
Barnsley, Kenneth	Blackburn with Darwen Borough Council Public Health Department	Consultant in Public Health	U.K.
Caldas de Almeida, Teresa	National Institute of Health Doutor Ricardo Jorge	Head of Health Promotion Unit	Portugal
Campos Esteban, Pilar	Ministry of Health. Health Promotion and Public Health Surveillance	Deputy Director	Spain
Costa, Alexandra	National Institute of Health Doutor Ricardo Jorge	Senior Technical Expert	Portugal
Costello, Suzanne	Institute of Public Health (IPH)	Director	Ireland
Dyakova, Mariana	Public Health Wales	International Health Lead	Wales
Gabrijelčič, Mojca	National Institute of Public Health (NIJZ), Centre for Analyses and Development of Health	Head of Centre	Slovenia
Gerits, Pol	FPS Public Health, Food Chain Safety and Environment	Strategic Advisor to the Director General	Belgium
Hocevar Grom, Ada	National Institute of Public Health (NIJZ)	Senior Expert	Slovenia
Lang, Gert	Austrian Health Promotion Fund (GÖG)	Health Promotion Officer	Austria
Magalhães Marques, Sibila Fernandes	ISCTE Lisbon University Institute, Centre for Social Research and Intervention	Professor, Integrated Researcher	Portugal

Molleman, Gerard	Radboud University Medical Center	Professor; Member scientific board RIVM behavioural science unit COVID-19	Netherlands
Moons, Tom	Pharos	Strategic Advisor	The Netherlands
Myrbäck, Filippa	Swedish Association of Local Authorities and Regions (SALAR)	Senior Advisor	Sweden
Oliveira, Paula	Fundação Nossa Senhora do Bom Sucesso	Managing Director	Portugal
Renwick, Lorna	Public Health Scotland	Organisational Lead, NHS Leadership, Health Equity	U.K.
Shah, Jalpa	Santé Publique France, Ageing people and Vulnerable Populations Team	Research Officer	France
Tortone, Claudio	Piedmont Regional Health Promotion Documentation Center (DoRS) - ASL TO3	Head of Plans and Projects Area, Public Health Doctor	Italy
Vandentorren, Stéphanie	Santé publique France, Scientific and International Department	Coordinator Health Inequalities	France

Annex III: Workshop participants

EuroHealthNet Members

Name	Organisation	Position	Country
Caldas de Almeida, Teresa	National Institute of Health Doutor Ricardo Jorge	Head of Health Promotion Unit	Portugal
Costa, Alexandra	National Institute of Health Doutor Ricardo Jorge	Senior Technical Expert	Portugal
Frykman, Jonas	Swedish Association of Local Authorities and Regions (SALAR)	Senior Advisor Public Health	Sweden
Gabrijelčič, Mojca	National Institute of Public Health (NIJZ), Centre for	Head of Centre	Slovenia

	Analyses and Development of Health		
Green, Liz	Public Health Wales	Programme Director for Health Impact Assessment	U.K.
Hocevar Grom, Ada	National Institute of Public Health (NIJZ)	Senior Expert	Slovenia
Lang, Gert	Austrian Health Promotion Fund (GÖG)	Health Promotion Officer	Austria
Magalhães Marques, Sibila Fernandes	ISCTE Lisbon University Institute, Centre for Social Research and Intervention	Assistant Professor, Integrated Researcher	Portugal
Molleman, Gerard	Radboud University Medical Center	Professor; Member scientific board RIVM behavioural science unit COVID-19	Netherlands
Plantz, Christina	Federal Centre for Health Education (BZgA)	Scientific Officer	Germany
Renwick, Lorna	Public Health Scotland	Organisational Lead, NHS Leadership, Health Equity	U.K.
Vandentorren, Stéphanie	Santé publique France, Scientific and International Department	Coordinator Health Inequalities	France
Viso, Anne-Catherine	Santé publique France, Scientific and International Department	Department Director	France

Moderators and hosts

Name	Organisation	Position
Costongs, Caroline	EuroHealthNet	Director
De Vries, Marit	National Institute for Public Health and the Environment (RIVM)	Human Geographer/Urban Planner, Centre for Health & Society

Godfrey, Alba	EuroHealthNet	Project Officer
Hilderink, Henk	National Institute for Public Health and the Environment (RIVM)	Project Lead, Dutch Public Health Foresight Study
Melse, Johan	National Institute for Public Health and the Environment (RIVM)	Facilitator

Annex IV: Discussion participants

EuroHealthNet Members

Name	Organisation	Position	Country
Barnsley, Kenneth	Blackburn with Darwen Borough Council Public Health Department	Consultant in Public Health	U.K.
Caldas de Almeida, Teresa	National Institute of Health Doutor Ricardo Jorge	Head of Health Promotion Unit	Portugal
Costa, Alexandra	National Institute of Health Doutor Ricardo Jorge	Senior Technical Expert	Portugal
de Vetten, Marjonneke	Dutch Association of Mental Health and Addiction Care (de Nederlandse ggz)	Network Coordinator	The Netherlands
Gabrijelčič, Mojca	National Institute of Public Health (NIJZ), Centre for Analyses and Development of Health	Head of Centre	Slovenia
Gil Luciano, Ana	Ministry of Health - Spain	Head of the Health Promotion and Equity Area	Spain

Grasso, Mara	Centro Regionale di Documentazione per la Promozione della Salute (DoRS) - ASL TO3	Sociologist	Italy
Karnaki, Pania	Institute of Preventive Medicine Environmental and Occupational Health (PROLEPSIS)	Head of European Programmes	Greece
Lehmann, Frank	Federal Centre for Health Education (BZgA)	Senior Advisor	Germany
Martín-Pérez, Alberto	Ministry of Health - Spain	Technical Officer, Health Promotion and Equity Area	Spain
Robnik Levart, Monika	National Institute of Public Health (NIJZ) - Slovenia	Sanitary Engineer	Slovenia
Servini, Christian	Public Health Wales	Futures Policy Officer	U.K.
Svanfeldt, Erik	Swedish Association of Local Authorities and Regions (SALAR)	International co-ordinator	Sweden
Woodfine, Louise	Public Health Wales	Principal Public Health Specialist	U.K.

Moderators and hosts

Name	Organisation	Position
Costongs, Caroline	EuroHealthNet	Director
Godfrey, Alba	EuroHealthNet	Project Officer
Hilderink, Henk	National Institute for Public Health and the Environment (RIVM)	Project Lead, Dutch Public Health Foresight Study
Needle, Clive	EuroHealthNet	Senior Policy Advisor

Our mission is to help build healthier communities and tackle health inequalities within and between European States.

EuroHealthNet is a not-for-profit partnership of organisations, agencies and statutory bodies working on public health, promoting health, preventing disease, and reducing inequalities.

EuroHealthNet supports members' work through policy and project development, knowledge and expertise exchange, research, networking, and communications.

EuroHealthNet's work is spread across three collaborating platforms that focus on practice, policy, and research. Core and cross-cutting activities unite and amplify the partnership's activities.

The partnership is made up of members, associate members, and observers. It is governed by a General Council and Executive Board.

EuroHealthNet

EUROPEAN PARTNERSHIP FOR IMPROVING HEALTH, EQUITY & WELLBEING

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EuroHealthNet is supported by the European Commission, through the EU Programme for Employment and Social Innovation (EaSI 2014-2020)