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Advancing public health for sustainable development in the WHO European Region

This document highlights the role of public health and its contribution to sustainable development and better health and well-being for all in the WHO European Region.

The document analyses the key demographic, social, environmental and technological transitions that are reshaping the scientific and policy context for public health action in the 21st century in the European Region. It highlights challenges encountered by public health actors, particularly with respect to addressing population health and well-being through multisectoral policy approaches and presents concrete options for moving forward.

It also defines directions for action that draw on inspiring examples of public health approaches and actions by governments and other societal actors at national, subnational and community levels.

It builds on an earlier document, Facing the future: opportunities and challenges for 21st-century public health in implementing the Sustainable Development Goals and the Health 2020 policy framework. (see http://www.euro.who.int/__data/assets/pdf_file/0011/369821/Facing-the-future-opportunities-and-challenges.pdf).

It also reflects comments received by Member States through an on-line consultation carried out in June 2018, as well as from an independent Advisory Group that met in Copenhagen on 11 June 2018.

The document is submitted as a background document for the discussions of the Sixty-eight session of the WHO Regional Committee for Europe.

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Introduction

- 1. Public health is "the art and science of preventing disease, prolonging life and promoting human health through organized efforts of society". It makes a massive contribution to health and well-being for all in the WHO European Region. The benefits of public health are multiple, enduring and impact the wider economy and environment.
- 2. This document makes a case for investing in public health in the WHO European Region as a mean to achieve the Sustainable Development Goals (SDGs), as foreseen in the Thirteenth WHO General Program of Work 2019-2023 (GPW13)².
- 3. The document shows that public health can provide an overarching and unifying platform which increases policy coherence and ensures a more consistent approach by the Member States in the implementation of the SDGs³, Health 2020, the European health policy health and well-being⁴ and the Roadmap to implement the 2030 Agenda for Sustainable Development⁵.
- 4. The public health functions within health systems are also highlighted, as in the European Action Plan for the Strengthening of Public Health Capacities and Services 2012–2020 (EAP-PHS),⁶ and in the numerous UN multilateral agreements that have a relevance for public health. ⁷
- **5.** The document summarizes evidence on how public health is vital to achieve sustainable development, and vice-versa.
- 6. It leverages the emergence of new public health conceptual models, which embrace complexity, are value-driven, and help address the important transitions in health, demography and sociology, which are challenging the attainment of health and well-being for all in the WHO European Region. It also highlights the paramount importance of political leadership for the development of strong, well-resourced and fit-for-purpose public health frameworks that effectively operate across sectoral boundaries and promote policy coherence.

Acheson, D Independent inquiry into inequalities in health – Report, The Stationary Office, 1988 (http://webarchive.nationalarchives.gov.uk/20130814142712/http://www.archive.official-documents.co.uk/document/doh/ih/ih.htm, accessed on24 August 2018)

³ United Nations Sustainable Development Goals. In: Sustainable Development Knowledge Platform [website]. New York (NY): United Nations; 2018 (https://sustainabledevelopment.un.org, accessed 11 May 2018).

⁴ 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, accessed 11 May 2018).

⁵Roadmap to implement the 2030 Agenda for Sustainable Development, building on Health 2020, the European policy for health and well-being 2017

(http://www.euro.who.int/ data/assets/pdf file/0008/345599/67wd09e SDGroadmap 170638.pdf?ua=1, accessed on 4 July 2018)

http://www.euro.who.int/__data/assets/pdf_file/0008/345599/67wd09e_SDGroadmap_170638.pdf?ua=1
⁶ European Action Plan for Strengthening Public Health Capacities and Services. Copenhagen: WHO Regional Office for Europe; 2012 (http://www.euro.who.int/__data/assets/pdf_file/0005/171770/RC62wd12rev1-Eng.pdf?ua=1, accessed 11 May 2018).

⁷ Non-exhaustive examples of UN landmark agreements include the Sendai Framework for Disaster Risk Reduction, the UNFCC and its Paris Agreement, World Humanitarian summit, the New Urban Agenda and the many Multilateral Environmental Agreements.

² Thirteenth general programme of work 2019¬–2023. In: About WHO [website]. Geneva: World Health Organization; 2018 (http://www.who.int/about/what-we-do/gpw-thirteen-consultation/en/, accessed 17 May 2018).

7. Finally, the document presents a set of proposed measures to strengthen public health for consideration by Member States in their pursuit of health and well-being for all.

Public health is more than healthcare

- 8. Public health means the health of the public as a human right, a public good and a value in itself. Public health deals with wide-ranging multisectoral determinants of health and policies at all levels of government. It delivers essential public goods, protects community health, addresses risk factors, and contributes to reducing inequalities in health outcomes. It aims to achieve the highest attainable standard of health as one of the fundamental rights of every human being⁸ as stated in WHO constitution.
- 9. Public health ensures access to the underlying determinants of good health, such as clean water, sanitation, clean air, healthy food, nutrition and housing, to healthy environments and to a comprehensive system of primary, secondary and tertiary prevention through the healthcare system, which is available to everyone without discrimination, and economically accessible to all. To achieve this, it requires the engagement of many non-health-sector actors, such as those working (intra alia) in education, urban planning, agriculture, transport and welfare sectors.
- 10. Good public health policy is guided by a value framework that includes health as a human right, a value, a global public good, a component of well-being and a matter of social justice. Acting with caution, promoting equity, addressing inequalities and achieving sustainability are important ethical objectives of good public health governance.
- 11. Public health services are an important component of Universal Health Coverage (UHC)⁹. Health systems are also an important determinant of health and should be orientated towards early detection and prevention of illness and health promotion, through primary and community care and a people-centred life-course approach which aims to reach the most vulnerable and deprived groups of the population (see Box 1).
- 12. Health services also need to be aware of and address their own impacts, which range from direct risks to health, such as infections associated with health-care facilities, to the healthcare sector's impacts on the environment, notably in terms of greenhouse gas and other pollutants emissions, and inefficiencies in energy and waste management.

Box 1: Reducing health inequality in Romania: consolidation of community health care system

To ensure health for all, especially for disadvantaged communities exhibiting high infant mortality rates, Romania consolidated its network of community health centers network and improved its medical community assistance legislation (Law 180/2018).

⁸ WHO Constitution (http://www.who.int/governance/eb/who constitution en.pdf, accessed on 29 June 2018)

⁹ UHC is defined as a situation in which all people and communities can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship.

Funded by Norway, the community health network comprises 45 community health centres, located in 6 counties throughout Romania, and provides care to a majority of vulnerable, poor population without access to basic health services. The local community team consists of a community nurse, a health mediator, a family doctor and nurse, and a social worker. Funding is provided by the Ministry of Health, the National Health Insurance House, and the local administration.

The services provided include information and family mobilization to support immunization, identification and monitoring of the TB patients, counselling and monitoring of pregnant women and girls, and identification and monitoring of the children with labor migrant parents.

Access and outcomes improved considerably. For example, during 2017 in one county there were no deaths of children aged 0-1 years. Overall the community health teams registered and provided services to more than 560,000 beneficiaries. The number of persons enlisted at the family doctor increased by 5%; infant mortality decreased by 1.5%; the number of pregnant women who accepted counselling increased by 5%; women using contraception increased by 1.5%; immunization increased by 2%; and the number of education activities increased by 8%.

In future, the aim is improved coordination among the local team, whose members are currently subordinated to different institutions. Also needed is capacity development for the local authorities to prepare and implement the model.

- 13. Governments have an obligation to provide effective public health capacities and services. Some of those obligations are mandated by international legally binding instruments, including human rights instruments.¹⁰
- 14. Within a strong human rights framework, economic arguments should be used more visibly and effectively, yet transparently, to demonstrate cost-effective investments which improve health and to show where investment might be withdrawn if interventions are known to be ineffective.

A new context for advancing public health leadership and action

Health, Health 2020, sustainable development and the WHO Thirteenth General Programme of Work (2019-2023)

15. Health and well-being are seen both as drivers of sustainable development and its outcomes.

¹⁰ For instance, the International Health Regulations (2005).

- 16. The SDGs highlight the interdependence of the 17 Goals, clarify and makes explicit the role and responsibility of other policy domains as public health actors and highlight, the distribution of the health effects across different socioeconomic and/or demographic groups. This implies that, while retaining institutional leadership for SDG 3, WHO and Member States need to work beyond SDG 3, extending to other Goals, whose targets have direct implications for health, or on which the health sector's footprint is significant.
- 17. In fact, WHO is designated as the "custodian agency" of some of the indicators, such as those associated to SDG 6, which aims to "ensure availability and sustainable management of water and sanitation for all", and to SDG 11, which aims to "make cities and human settlements inclusive, safe, resilient and sustainable", particularly in the latter case with respect to the indicators related to urban air quality.
- 18. This further highlights the need for governments as a whole to be aware of, and become accountable for, the effects on health and well-being of sectoral policies, and the effects of health sector on SDG's.



Fig. 1. Health in the Sustainable Development Goal era

19. The European Member States have been the leader in rethinking new approaches to public health as defined in Health 2020¹¹, which aims to improve health for all and reduce health inequalities, through improved leadership and governance for health. Health 2020 elaborates a vision of public health as a societal and governmental responsibility, mobilizes dynamic networks of stakeholders at all levels of society and aims to support action with unity of purpose across the Region.

¹¹ 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, accessed 11 May 2018).

- 20. The Roadmap to implement the 2030 Agenda for Sustainable Development, building on Health 2020¹², was adopted by the Regional Committee in 2017 and reinforces health as a human right, calling for alignment of national health and development policies.
- 21. Many European Member States have taken action to integrate the SDGs into national action and policies and developed or are developing national sustainable development plans. Commissions or whole of government institutional mechanisms at the highest level of government have been created to drive the agenda forward.
- 22. The WHO Thirteenth General Programme of Work 2019-2023 (GPW 13) states that WHO will drive public health impact in every country and lead a transformative agenda that supports countries in reaching all health-related SDG targets.
- 23. The GPW 13 is strongly informed by the United Nations Agenda 2030 and the SDGs, and in particular SDG 3 on good health and well-being. In order to accelerate progress towards SDG targets, GPW 13 focuses on three interconnected areas: achieving universal health coverage, addressing health emergencies, and promoting healthier populations. It commits WHO to 'triple billion' targets," wherein WHO aims to ensure that by 2023: one billion more people benefit from universal health coverage (UHC); one billion more people have better protection from health emergencies; and one billion more people enjoy better health and well-being.

Key transitions in health and demography in the WHO European Region pose new challenges to public health

- 24. The WHO European Region is witnessing a demographic and social shift, characterized by rapid ageing and greater longevity of the population the proportion of people aged 65 years and older is expected to reach 25% by 2050. This is accompanied by changing living, working and consumption patterns and habits. Growing urbanization and globalization of the economy will, on the one hand, increase access to more and better services, social opportunities, goods and technologies but, on the other hand, may further increase inequity, with disproportionate adverse health impacts on the poorest and most vulnerable. Taken together, these changes are contributing to an unprecedented epidemiological transition.
- 25. In the WHO European Region, noncommunicable diseases accounted for an estimated 89% of deaths (all ages) and 86% of years lived with disability in 2015.13 Four major noncommunicable diseases (cardiovascular disease (CVD), diabetes, cancers and chronic respiratory diseases) are responsible for two thirds of premature death (30-69 years) in the Region14. Mental disorders rank as the first cause of years lived with disability (YLD) in Europe, accounting for 36.1% of those attributable to all causes in 2012¹⁵.

http://www.euro.who.int/__data/assets/pdf_file/0008/345599/67wd09e_SDGroadmap_170638.pdf?ua=1

Sitges report Regional trends in noncommunicable disease outcomes: WHO Regional Office for Europe; 2018 [in press]

[[]in press]

14 Action Plan for the Prevention and Control of Noncommunicable Diseases in the WHO European Region 2016-2025: WHO Regional Office for Europe; 2016 (<a href="http://www.euro.who.int/en/health-topics/noncommunicable-diseases/pages/policy/action-plan-for-the-prevention-and-control-of-noncommunicable-diseases-in-the-who-european-region-20162025, accessed 28 June 2018)

¹⁵ http://www.euro.who.int/en/health-topics/noncommunicable-diseases/mental-health/data-and-resources

- 26. At the same time, there are a number of longer term health challenges that continue to need to be addressed, including further reductions in maternal and child mortality, the changing dynamics of the communicable diseases, and the growing challenges from antimicrobial resistance.
- 27. Health emergencies, either due to outbreaks, natural disasters or conflicts, and the effects of climate change (particularly in relation to changing patterns of disease, extreme weather events, and water and food security) impose serious pressure on health and wellbeing. Their direct link to international and national security, above and beyond the health considerations, places them very high on the political agenda of many Member States.
- 28. The combination of these life-threatening events in many regions of the world as well as aspirations for better living conditions and economic opportunities, have also triggered an unprecedented surge in migration towards and within Europe, with 78 million international migrants estimated to be living in the Region at the end of 2017¹⁶, accounting for nearly 8% of the total population.
- 29. Next to these demographic and epidemiological transitions, health systems are also confronted with the need to respond to the transition in technologies. These can provide new opportunities to attain improved health outcomes, reduce risks to patients, reduce the need for hospitalization, faster communication, integrated management of patient data, better access for patients to health services and better screening and diagnostic services.
- 30. However, technological development also poses a challenge in terms of rising costs of health care. This is driven partly by the growing demand for health care, partly by the need to invest in and provide access to more costly technology and innovation, and partly by the failure of investing in effective public health preventative interventions, as well as in integrated health and social care systems. Addressing this challenge requires, among other things, adequate health technology assessments and extensive preventive policies within a life course approach.

New scientific and policy thinking to address emerging public health threats and opportunities

- 31. Over the past 20 years a range of new scientific findings have emerged that in turn have prompted the development of a number of conceptual frameworks in the public health arena. We have an increasing understanding that human health is affected by genetic, epigenetic and intrauterine legacies, environmental exposures, family and social relationships, behaviours, political and cultural contexts, social norms and opportunities, gender roles and health system interventions which all operate throughout the life course and are carried into future generations. In turn, these are shaped or modified by policies, environments, opportunities and norms created by society.
- 32. This work has shown that the pathways to health inequities are highly multifactorial and that the diversity of human contexts in which health is created and determined need to be better understood. As illustrated by WHO Europe's cultural contexts of health and well-being

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http://www.un.org/en/development/desa/population/migration/publications/populationfacts/docs/MigrationPopFacts20175.pdf (accessed on 28 August 2018)

project, ¹⁷ embracing this complexity requires a paradigm shift that incorporates cultural awareness into policy-making and increases the use of qualitative information from a multidisciplinary evidence base that includes neglected areas such as the medical humanities, for instance ¹⁸. It also places a new emphasis on measuring health and well-being instead of merely focusing on the measurement of death, disease and disability.

Planetary health for human species survival

- 33. New perspectives have also been emerging in the process of defining the root causes of health and ill-health, with the concepts of planetary and ecological public health. The One World, One Health strategic framework, for instance, establishes a more interdisciplinary and cross-sectoral approach to preventing epidemic or epizootic disease and for maintaining ecosystem integrity¹⁹. Ecological public health focuses on the indivisibility of planetary and human health and addresses major public health determinants, such as climate change, air, water and soil pollution, disasters, and the environmental, social and economic impacts of production, consumption and trade policies and agreements.^{20,21}
- 34. For several decades research has been revealing a much more subtle and complex contribution from environment to many contemporary health and wellbeing challenges (e.g. obesity, diminished mental health and wellbeing, NCDs and of course inequality). An important new realization is that environments can be salutogenic and health enhancing as well as pathogenic.
- 35. This opens new opportunities. For example, urban policies that result in a compact and mixed land use, can facilitate cycling and walking in combination with public transport, supporting more physically active life-styles, while at the same time reducing emissions of greenhouse gas, air pollutants and noise, and reducing congestion. This may, in turn, result in improved quality of urban life, and possibly increased competitiveness and attraction of investments.
- 36. In this context, the health sector can also play a leading role by "walking the talk" and becoming environmentally sustainable, particularly by contributing to mitigating the effects of climate change. By doing so, the health sector can create a series of health, economic and social co-benefits that improve the health of the population in addition to the traditional role of the health sector in the delivery of quality health care.

¹⁷ http://www.euro.who.int/en/data-and-evidence/cultural-contexts-of-health

http://www.euro.who.int/ data/assets/pdf file/0009/334269/14780 World-Health-Organisation Context-of-Health TEXT-AW-WEB.pdf?ua=1 accessed on 4 July 2018

¹⁹ FAO, WHO, OIE, UNSIC, UNICEF, World Bank. Contributing to One World, One Health – A strategic framework for reducing risks of infectious diseases at the animal-human-ecosystems interface (http://www.fao.org/docrep/011/aj137e/aj137e00.htm, accessed on 29 June 2018)

²⁰ Ecological public health: the 21st century big idea? An essay by Tim Lang and Geof Rayner. BMJ. 2012;345:e5466. https://doi.org/10.1136/bmj.e5466.

²¹ Whitmee S, Haines A, Beyrer C, Boltz F, Capon AG, Ferreira de Souza Dias B et al. Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation–Lancet Commission on planetary health. Lancet. 2015;386(10007) (http://www.thelancet.com/commissions/planetary-health, accessed 11 May 2018).

37. For example, energy and resources inefficiencies of health-care facilities contribute substantially to climate change while inadvertently contributing to respiratory and other illnesses. Procurement, resource use, waste water treatment (notably with respect to discharges of endocrine disruptors), excessive use of antimicrobials, management of health care facilities waste, transportation and other policies and practices contribute to the health sector's significant climate footprint. By reducing this footprint and moving toward carbon neutrality, the health sector can demonstrate the path forward in response to climate change, and environmental threats, thereby playing a leadership role in advocating for a healthy and sustainable future. Of particular regard here, the fossil fuel consumption of hospitals, often situated in city centres, should be monitored and if possible mitigated.

A "culture of health and well-being" could make healthy behaviours as the norm

- 38. Another set of perspectives argue for a new wave of public health focused on a "culture of health and well-being" in which healthy behaviours are the norm, and in which "the institutional, social, and physical environment support [sic] this mindset".²² Here "opportunities to be healthy and stay healthy are valued and accessible to everyone across the entire society"²³. This perspective acknowledges the value-driven nature of, for instance, health equity, and the complex cultural contexts that often enhance and sometimes interfere with efforts to improve public health, such as, for example, the poor value given to education and culture in some contemporary societies.
- 39. Building a culture of health to improve population health, well-being and equity means: making health a shared value; fostering cross-sectoral collaboration to improve well-being; enhancing bottom-up, participatory approaches; creating healthier and more equitable communities; and strengthening integration of health interventions, services and systems across sectors into a coherent system, while enhancing the societal function of public health²⁴.
- 40. Such a "culture of health" would be mutually reinforcing with a culture of sustainable behaviors (e.g. environmental, economic and health benefits of cycling). This also needs to be integrated by and linked to environments that enable the choice of healthy behaviours and protect and promote health.
- 41. Addressing health equity by focusing solely on the most disadvantaged will not reduce health inequalities sufficiently. To reduce the steepness of the social gradients in health, actions must be universal, but with a scale and intensity that is proportionate to the level of disadvantage. This approach is called "proportionate universalism". ²⁵ This also requires addressing the inequality gap created by low education and poor jobs.
- 42. Early-life, upstream and macro-policy-related factors are the critical drivers of many adult health outcomes. Actions on preconception, pregnancy, foetal development and the most

2014;47(5) Suppl.3:S388–90. https://doi.org/10.1016/j.amepre.2014.07.037.

²² Davies S, Winpenny E, Ball S, Fowler T, Rubin J, Nolte E. For debate: a new wave in public health improvement. Lancet. 2014;384(9957):1889–95. https://doi.org/10.1016/S0140-6736(13)62341-7.

²³ Plough AL. Building a culture of health: challenges for the public health workforce. Am J Prev Med.

²⁴ Trujillo MD, Plough A. Building a culture of health: a new framework and measures for health and health care in America. Soc Sci Med. 2016;165(206):213. https://doi.org/10.1016/j.socscimed.2016.06.043.

²⁵ Marmot M. The health gap: the challenge of an unequal world. London: Bloomsbury; 2016.

vulnerable life stages are needed, focusing particularly on early-life-prevalent causes such as Foetal Alcohol Spectrum Disorder (FASDs), material deprivation, early childhood education and child adversity.²⁶

Communication and information technology: between opportunities and threats

- 43. Communication and information technology, in particular social media and their role in creating virtual settings where people interact, communicate, exchange and disseminate ideas and information, have changed people's perceptions and expectations regarding the accessibility, transparency and openness of health communication, as well as the transparency and responsiveness of organizations.
- 44. When harnessed effectively, the speed, access and informality provided by social media technologies can contribute powerfully to public health action, achieving stronger and further-reaching health promotion and a greater impact on behaviours. Yet, they have become in a number of circumstances in several countries, severe threats for public health, for example from disseminating misinformation (fake news) and false scares that artfully generate false alarms and distrust, such as those associated to the anti-vaccine movement, or, on the contrary, fueling positive expectations not based on evidence such as those promoted by the ecigarette/vaping lobbying. The compulsive use of social media may also have negative health effects, resulting in rising stress, anxiety and other mental health problems especially among young, impressionable and vulnerable people.

Current public health implementation challenges

- 45. A recent analysis of national health policy and practice in Member States of the Region indicates that the proportion of countries with national health policies aligned with Health 2020 increased from 58% in 2010 to 93% in 2017.²⁷ While this provides an indication, it does not speak about the level of implementation and financing.
- 46. A review of public health capacities in the WHO European Region was carried out in 2016.²⁸ While there has been overall progress in strengthening public health in the Region, more needs to be done. In particular, there is a need to close the clear gap between political commitments to public health and the actual resources allocated to it; to place more focus on development of the public health workforce; to better organize governance arrangements (including accountability mechanisms); to start the work on mitigating the environmental

 $\label{lem:lem:http://www.euro.who.int/_data/assets/pdf_file/0010/345799/Quality_Indicators_2017_EN_FINAL_WEB.pdf?u $$a=1$, accessed on 4 July 2017)$

²⁶ Ludwig J, Phillips DA. Long-term effects of head start on low-income children. Ann N Y Acad Sci. 2008;1136:257–68.

²⁷ On the road to Health 2020 policy targets: monitoring qualitative indicators. An update. Copenhagen: WHO Regional Office for Europe; 2017.(

²⁸ Lessons learned from Member State assessments of Essential Public Health Operations. Copenhagen: WHO Regional Office for Europe; 2016 (EUR/RC66/Inf.Doc./4; http://www.euro.who.int/__data/assets/pdf_file/0006/317994/66id04e_EPHOAssessments_160576.pdf?ua=1, accessed 11 May 2018).

footprint of healthcare; and to assign stronger legislative mandates for public health and public health legislation that is properly enforced.

- 47. Achieving these objectives would be greatly facilitated by the establishment of intersectoral committees at high level within governments, which take the lead on the development of national health policies as part of national development agendas. This direction is also incorporated in the Roadmap to implement the 2030 Agenda for Sustainable Development, building on Health 2020, the European policy for health and well-being.
- 48. The acceptance and implementation of evidence-informed public health policies is influenced by the political, social, cultural and organizational contexts. In particular, multisectoral thinking and work across different levels of government and with engagement of various stakeholders, which are essential for good public health, are challenging to achieve. Difficulties may involve governance issues, including non-existent or unclear mandates or a lack of legitimacy, skills and a sense of priority for operating across sectoral boundaries, as well as institutional or departmental ownership and accountability. There may be a lack of commitment or willingness to move policy "upstream" to health promotion and disease prevention. Often worries exist, or may be manufactured, that there is insufficient evidence to underpin public health policies and actions.
- 49. A challenge of special significance is posed by the fact that financing for public health is often seen as inadequate, both in absolute terms and in comparison with the money allocated to health care. This imbalance is partly due to political, managerial and public preoccupation with medical care services focused on treatment, as well as with strong vested interests, which often stand in the way of greater investment in public health action This is despite the increasing recognition in national policy statements and documents of the need for improved health promotion and disease prevention activities given the noncommunicable disease epidemic, and, in some countries, the double burden posed by the persistence of communicable diseases.
- 50. The politics, economics and practicalities of public health also matter, for example the economic, environmental and employment implications of public health actions. Although it is important to acknowledge that the available data on public health expenditure are not comparable across countries and the definitions are not clear, based on available data, on average a total of 3% of national health-sector budgets in Europe (range: 0.6–8.2%) is currently spent on public health and prevention, indicating that there is scope for increases in public health investment in order to enhance cost-effective interventions that have positive health and wider outcomes. Investing in cost-effective interventions will be of growing importance, if healthcare is to remain affordable and accessible to all.
- 51. Failure to act may be costly: the Organisation for Economic Co-operation and Development predicts that, according to current trends, if nothing is done the cost of health care will double by 2050. Yet, evidence shows that a wide range of preventive approaches are cost-effective in both the short and the longer term. These include interventions that address the environmental and social determinants of health, build resilience of individuals, communities and society, and promote healthy behaviours, as well as vaccination and screening. In addition, investing in public health and generating cost-effective health

outcomes can contribute to wider sustainability, with economic, social and environmental benefits.²⁹

Public health makes multiple contributions to population well-being in the current policy, scientific and epidemiological context

- 52. Public health can make three important contributions to population health and well being.³⁰
 - As an outcome of equitable improvements in health and well-being: Governments are required to establish the equitable promotion of health and well-being as a function of governance for health. To do this, they need to provide functioning public health capacities and services with influence across all health-related determinants and sectors, as well as a functioning health system.
 - As a function embracing the whole of government and society: this is the public health function at central level, supporting the human right to health. The commitment of heads of state, presidents and prime ministers is crucial, supported by health and other ministers, the civil service, capable public health institutions, civil society, the private sector, and communities and populations.
 - As a set of specialist functions within the health system: The broad public health function includes specialist capacity providing many technical public health services from within the health system. Elements of the public health workforce serve both population and individual health objectives, as well as research.
- 53. To operationalize these contributions, several actions could be undertaken as part of a comprehensive approach, as detailed below:

Establish an explicit ethical framework, which also addresses conflicts of interest

54. Greater clarity is needed about common values underlying the process of identifying, implementing and assessing the courses of action in public health policy. An explicit statement of adherence to common values and principles, such as those stated in the Council Conclusions on Common values and principles in European Union Health Systems can be used as a reference and adopted at national level.³¹.

The case for investing in public health – a public health summary report for EPHO 8. Copenhagen: WHO Regional Office for Europe; 2014 (http://www.euro.who.int/__data/assets/pdf_file/0009/278073/Case-Investing-Public-Health.pdf, accessed 11 May 2018).

^{1.} Council Conclusions on Common values and principles in European Union Health Systems (2006/C 146/01) (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52006XG0622(01), accessed on 29 June 2018)

- 55. Legislation and governance involving all levels and all sectors and stakeholders should be developed and implemented in a context of transparency, accountability, integrity, policy coherence, knowledge, and require population's participation in the appropriate forms. A wide range of public health actors are involved beyond the government itself for example parliaments, civil society organizations, the media and the private sector.
- 56. Within this context, special attention needs to be paid to preventing and addressing conflicts of interest which may arise. Commercial interests may influence public health actors, such as governments, legislators and regulators, as well as non-health sectors whose policies impact on health.
- 57. This is best exemplified by the political tensions arising in relation to taxation of unhealthy foods, alcohol and tobacco, restrictions to the emissions of pollutants from the industry, energy and transport sectors, or limitations to marketing of unhealthy foods. The strong preference of private actors for self-regulations and voluntary agreements, over regulations, standards and norms should also be assessed within this context. Here, the assertion of the primacy of public over private interests needs to be made explicit, and appropriate governance mechanism and guidance need to be developed to safeguard the application of this principle.

Strengthen governance for health and well-being at the national and local level

- 58. A good public health policy acts as a catalyst across sectors, mainstreaming public health objectives throughout the whole system of governance. It is grounded on the affirmation of health as a human right and on acceptance of the obligation of governments to ensure prerequisites for citizens' health and well-being and protect these. Strengthened governance for health and well-being is critical to the functioning of the multisectoral, multiagency, multiprofessional and multistakeholder collaborations needed to deliver effective public health. An important outcome of a strengthened system of governance for health and well-being is that it ensures that the actions undertaken across the different sectors are fit for purpose.
- 59. Good governance for health and well-being has an overarching purpose: to ensure that the results of the process that has been planned and implemented are as expected and that the feedback loop of policy-making and implementation runs smoothly. Accordingly, governance has been recognized in two SDGs (SDG 16 and SDG 17). Good governance also promotes policy coherence (see Box 2).

Box 2: The challenge of policy coherence

Although many resources have been invested in health policy development within the Health 2020 framework by Member States and WHO, policy coherence remains one of the greatest challenges. The WHO progress report on national health policy development demonstrates successes: an increase in the number of countries that have developed national health policies,

increasing attention to equity, social determinants and universal health coverage and efforts to develop operational as well as monitoring and evaluation frameworks.³² However, the issue of policy coherence does not appear to be adequately addressed, and key building blocks for its attainment have yet to be deliberately and appropriately developed at country level. These include political commitment and leadership, integrated approaches to implementation, an intergenerational time frame, analyses and assessments of potential policy effects, policy and institutional coordination, involvement of all levels of governance, stakeholder participation and monitoring and evaluation.³³

- 60. Good governance for health and well-being is participatory, inclusive and transparent, and has the capacity to innovate. Its structures improve issue-framing, stakeholder engagement, evidence collection and synthesis and the development and dissemination of recommendations for policy-makers and others. It promotes trust through transparency and accountability, clarifies responsibilities, provides the institutional infrastructure for allocating resources to support action, addresses challenges related to the science-policy interface and encourages the collaborations needed to deliver services.
- 61. Community organizations and civil society can make a substantial contribution to public health and health systems with regard to policy development, service delivery and governance for health and well-being. The community in this case may involve both society in general, with its civil society institutions, but also the particular subsets of the population most affected by such policies and interventions. This contribution includes evidence provision, advocacy, mobilization, consensus building, and the provision of public health services and of services related to the social and environmental determinants of health, standard setting, self-regulation and the fostering of social partnerships.
- 62. Building broad coalitions for public health at country and local levels (involving a wide range of stakeholders) and establishing mechanisms for shared responsibility for implementation of policy-making and practice, while enabling a system of continuous learning from participatory monitoring and evaluation, is the best way to ensure that the needs of all people in society are adequately addressed. Co-creation and participatory processes are key processes driving these coalitions, and it is of vital importance that the capacity of public health systems is adequate to steward, manage and leverage the benefits of such processes (See Box 3).

Box 3: Building a coalition for public health workforce development in Poland

The Council for Cooperation and Workforce Training was established in December 2017 by the Director of the Polish National Institute of Public Health (NPHI). Its main aim is to bring together representatives of key stakeholders in public health system in Poland, as well as representatives of universities that provide training in public health, in order to harmonize workforce needs assessment in public health and development of key competences. The Council works under a patronage of Deputy Minister of Health responsible for public health domain and encompasses delegated persons from Ministry of Health (Department of Public

³² On the road to Health 2020 policy targets: monitoring qualitative indicators. An update. Copenhagen: WHO Regional Office for Europe; 2017.

³³ Organisation for Economic Co-operation and Development. Policy coherence for sustainable development 2017: eradicating poverty and promoting prosperity. Paris: OECD Publishing; 2017. http://dx.doi.org/10.1787/9789264272576-en.

Health), General Sanitary Inspection, National Health Fund, Agency for Health Technology Assessment, Association of Schools of Public Health in the European Region (ASPHER) and Deans of Faculties of Health Sciences or their deputies. The Council established working groups that analyse and propose appropriate actions in the field of legal framework for public health workforce, development of competence framework and harmonization of public health curricula. The Council meets in a plenary session once in a quarter and in the meantime, it works in a close loop of discussion on selected topics. Members of the Council also participate in activities coordinated by NIPH such as preparation of workshops for local health authorities on public health priorities or formal process of development of Sectoral Framework of Competences in Public Health.

New models for health systems

- 63. Reflecting these good governance principles, some new models of health systems are emerging, for example accountable care organizations or partnerships, ^{34,35,36,37,38,39} although these are at an early stage of development and evaluation. Crucially, these models focus on a stewardship role of the health system for improving health outcomes in geographically defined populations, including addressing upstream socioeconomic, environmental, behavioural and developmental determinants of health. Within these models, multiple health and human service sectors share leadership, create a common purpose, and align and distribute accountability for addressing social and developmental conditions.
- 64. Each model is context-specific, yet the following requirements are common: political and governmental commitment as a driving force that stimulates the implementation process; a local infrastructure; a physical or virtual organization that supports horizontal alignment and integration of medical, public health and population health services and support; financing arrangements that expand the concept of value to include the creation of health and well-being as a social investment; and the development of new forms of health-related information and information management that measure population health trajectories and demonstrate return on health investments by linking investments to health, community, environmental and economic outcomes.

³⁴ Schulte T, Pimperl A, Hildebrandt H. Comparing accountable care organizations in the public sector of the US healthcare system to the integrated care system Gesundes Kinzigtal in Germany and potential lessons learned. Int J Integr Care. 2015;15(5). http://doi.org/10.5334/ijic.2157.

³⁵ Ádány R, Kósa K, Sándor J, Papp M, Furjes G. General practitioners' cluster: a model to reorient primary health care to public health services. Eur J Public Health. 2013;23:529–30. https://doi.org/10.1093/eurpub/ckt095.

³⁶ La sanità d'iniziativa in Toscana: un primo bilancio a tre anni dall'adozione [Health initiatives in Tuscany: an initial assessment three years post-adoption] (https://www.ars.toscana.it/it/aree-dintervento/problemi-di-salute/malattie-croniche/news/2139-la-sanita-d-iniziativa-in-toscana-un-primo-bilancio-a-tre-anni-dall-adozione.html, accessed 11 May 2018).

³⁷ Nalin M, Baroni I, Romano M, Levato G. Chronic related groups (CreG) in Lombardy. Eur Geriatr Med. 2015;6(4):325–30. https://doi.org/10.1016/j.eurger.2015.03.005.

³⁸ Ham C. Making sense of integrated care systems, integrated care partnerships and accountable care organisations in the NHS in England. In: King's Fund [website]. London: King's Fund; 2018 (https://www.kingsfund.org.uk/publications/making-sense-integrated-care-systems, accessed 17 May 2018).
³⁹ Local partnerships to improve health and care. In: NHS England [website]. Leeds: NHS England; 2018 (https://www.england.nhs.uk/systemchange/, accessed 11 May 2018).

65. Notably, these new models generally rely less on structures and organizational arrangements and more on relationships and functions. ⁴⁰

Adopt transformative approaches to deliver public health action across different sectors

- 66. The 2016 report by the United Nations Research Institute for Social Development (UNRISD), *Policy innovations for transformative change: implementing the 2030 Agenda for Sustainable Development*41, states that transformative social development is crucial to implementing the United Nations 2030 Agenda and must involve fundamental changes in institutions to make them more inclusive and equitable, as well as fostering a redistribution of power and economic resources towards common goals.
- 67. Within the health sector, a transformative approach requires change in the way the health sector thinks and prioritizes investment, building on the understanding of the relationship between health and health care42 and giving greater priority to prevention and an understanding of the dynamic nature of public health and whole-of-government approaches, including social protection systems.
- 68. A transformative approach to public health includes strengthening political choices for health and well-being. This includes political commitment to health and well-being at the highest levels of government, supported through parliamentary processes and decision-making at the different levels of national, subnational and local governance, allowing for continuity across political cycles. (see Box 4).

Box 4. Transformative approaches in the experience of the WHO Healthy Cities Network

Transformative action includes leveraging new and existing partnerships at the local level. The work of the WHO European Healthy Cities Network has provided 30 years of experience in building local coalitions for public health, improving public health at the local level, and strengthening public health governance through the fostering of vertical coherence between different levels of government, from national to regional to local.

For example, the Russian National Network Association of Healthy Cities, Regions and Settlements undertakes a number of national projects involved in building a culture of health and well-being, including amongst children, educational institutions and others. 43

⁴⁰ Hannaway C, Plsek P, Hunter DJ. Developing leadership and management for health. In: Hunter DJ, editor. Managing for health. Routledge: Abingdon; 2007:161–4.

⁴¹ Policy innovations for transformative change: implementing the 2030 Agenda for Sustainable Development. Geneva: United Nations Research Institute for Social Development; 2016 (http://www.unrisd.org/UNRISD/website/document.nsf/(httpPublications)/92AF5072673F924DC125804C0044 F396?OpenDocument, accessed 11 May 2018).

⁴² The European health report 2015. Targets and beyond – reaching new frontiers in evidence. Copenhagen: WHO Regional Office for Europe; 2015 (http://www.euro.who.int/en/data-and-evidence/european-health-report/european-health-report-2015/ehr2015, accessed 11 May 2018).

⁴³The Russian National Network Association of Healthy Cities, Regions and Settlements http://zdorovyegoroda.ru/projects/ Accessed 4 July 2018

The Finnish Healthy Municipality Network was an active partner during the consultation on the Finnish healthcare and social services reform.

The National Healthy Cities and Counties of Ireland Network is integrated into the national health policy, 'Healthy Ireland' as provides an implementation vehicle at the local level while strengthening a means for local issues to feed into national policy⁴⁴.

- 69. A key role for ministries of health is to protect public health as a universal value and a public good and to promote it as a shared social and political objective for all sectors and an indicator of success for government as a whole. This includes building systems of governance that strengthen ownership, participation and accountability for public health across the sectors and actors involved. Technical excellence alone is not sufficient public health is a political choice, and this must be reflected throughout the workings of government at all its levels.
- 70. Evidence needs to be effectively communicated and presented with relevant examples to politicians, policy-makers, professionals and the public in terms, and with examples, that they both understand and on which they can take action.
- 71. In addition, the social capital perspective indicates that enhancing population health cannot be achieved through material inputs alone. ⁴⁵ It will be equally important to pay attention to the quality and quantity of relationships and the distribution of power and trust, which support material or technological transfers and make them interpretable.

Enhance investments in public health

- 72. The available evidence shows that public health interventions can be cost-saving and that high returns for health and sustainable development can be achieved through investing in public health policies across the Region.
- 73. Many public health interventions are highly cost-effective in their own right and/or can save costs. Some are delivered within the health system, while others are delivered in partnership with other sectors or actors. In the UK, a highly cost-effective intervention is the screening programme for older women at high risk of hip fractures, as it suggests a cost per QALY gained of US\$4,111. As a cost-saving initiative, in Italy, a return on investment analysis suggests the universal hepatitis B vaccination will return US\$2.78 for every US\$1 invested from the health system with the programme breaking even within 20 years. More headline figures include that preventive approaches contribute between 50%-75% to the reduction of cardiovascular mortality in high-income countries and 78% globally⁴⁶. Meanwhile, in 2016 the cost of physical inactivity globally was estimated at US\$67.5 billion in health care expenditure and lost productivity⁴⁷.

⁴⁴ The National Healthy Cities And Counties Of Ireland Network http://www.healthyireland.ie/about/cities-and-counties/ Accessed 4 July 2018

⁴⁵ Szreter S, Woolcock M. Health by association? Social capital, social theory, and the political economy of public health. Int J Epidemiol. 2004;33(4):650–67. https://doi.org/10.1093/ije/dyh013.

⁴⁶ http://www.euro.who.int/__data/assets/pdf_file/0009/278073/Case-Investing-Public-Health.pdf?ua=1 ⁴⁷ Ding D et al. The economic burden of physical inactivity: a global analysis of major non-communicable diseases. Lancet 388(10051): 1311-1324. http://dx.doi.org/10.1016/S0140-6736(16)30383-X

- 74. Cost-effective preventive approaches can contribute to improvements in health outcomes at lower and more sustainable cost, while supporting universal health coverage and mitigating the environmental footprint of healthcare. For example, a new WHO global report on returns on investment from investing in NCD prevention, estimates that every \$1 invested in the WHO "Best Buys" for NCDs (the most cost-effective interventions) will yield a return of at least \$7 by 2030, and that implementing the WHO "Best Buys" can generate 350 US\$ billion in economic growth between now and 2030⁴⁸. Similar findings are available at the country level, indicating that economic losses from NCDs are equivalent to 3.9 % of gross domestic product in Kyrgyzstan⁴⁹ and 5.4 % in Belarus.⁵⁰ Health promotion and prevention bring results: a 10% reduction in cardiovascular diseases could save €20 billion per year in lower- and middle-income countries. In particular, there is a need to invest in social protection.
- 75. Investing in early childhood development is estimated to produce a 17-fold return for each euro invested. The cost of not taking action is significant: the direct and indirect costs of a high disease burden in countries can consume up to 15–20% of GDP.
- 76. Reducing health inequality by 1% per year would increase a country's annual rate of GDP growth by 0.15%. Already in 2011, it was estimated that, in the European Union, inequality related health problems reduce labour productivity and take 1.4% off GDP each year. Moreover, health inequality related welfare costs were estimated to be €980 billion per year, or 9.4% of GDP⁵². Tackling inequalities can also bring huge savings to the health system itself. In England, for example, socio-economic inequalities which in turn drive health inequalities (the social gradient) are estimated to cost the National Health System £4.8 billion a year as a result of excess hospital admissions⁵³.
- 77. Despite such examples and an increasingly robust evidence base, spending on public health remains modest. However, there is growing momentum in the WHO European Region to expand financing initiatives that support public health actions, including those that are intersectoral. Developing the case for investing in public health through disease prevention, as a means of saving on the increasing costs of treatment, by working with finance decision-makers and stressing "win-win" areas, will be an important way of making progress. Here it is important to overcome the "prevention paradox" where it is argued that while a given

⁵⁰ Prevention and control of noncommunicable diseases in Belarus. The case for investment: WHO Regional Office for Europe; 2018 (http://www.euro.who.int/en/countries/belarus/publications/prevention-and-control-of-ncds-in-belarus-the-case-for-investment-2018, accessed on 28 June 2018)

⁴⁸ Saving lives, spending less: a strategic response to noncommunicable diseases: WHO; 2018 (http://www.who.int/ncds/management/ncds-strategic-response/en/, accessed on 28 June 2018)

⁴⁹ Prevention and control of noncommunicable diseases in Kyrgyzstan. The case for investment: WHO Regional Office for Europe; 2017 (http://www.euro.who.int/en/countries/kyrgyzstan/publications/prevention-and-control-of-noncommunicable-diseases-in-kyrgyzstan.-the-case-for-investment-2017, accessed on 28 June 2018)
⁵⁰ Prevention and control of noncommunicable diseases in Belarus. The case for investment: WHO Regional

⁵¹ Grimm M. Does inequality in health impede growth? The Hague: International Institute of Social Studies of Erasmus University (ISS); 2010 (ISS Working Papers, General Series 501).

⁵² Mackenbach, JP, Meerding WJ, Kunst AE. Economic costs of health inequalities in the European Union. J Epidemiol Community Health 2011 May: 65(5): 412-419: doi: 10.1136/jech.2010.112680

⁵³ Asaria M, Doran T, Cookson R. The costs of inequality: whole-population modelling study of lifetime inpatient hospital costs in the English National Health Service by level of neighbourhood deprivation. J Epidemiol Community health 2016; 70:990-996. http://dx.doi.org/10.1136/jech-2016-207447

⁵⁴ World Health Report 2002 – Reducing risks, promoting healthy life, 2002, World Health Organization (http://www.who.int/whr/2002/en/, accessed on 4 July 2018)

intervention may benefit a large group collectively, the individual benefits are too small to have an attractive impact for those responsible for disbursing funds.

- 78. Strategies and studies to demonstrate the co-benefits to relevant sectors are key identifying so-called "win-win" scenarios will help to fund or cost-share specific interventions. For example, making the case for investing in better school meals to promote children's health (ostensibly a public health issue), can be tied to improving educational results (education sector), better workforce prospects (labour sector), and resultant contribution to the economy (economy and finance sectors). In some cases, the health improvement can be generated by relatively modest investments from another sector: for example, infrastructure and transport spending on more frequent bus stops, in order to make them more accessible to older people, can contribute to healthy ageing. In this regard, Health in All Policies (HiAP) approaches are an important way of engaging other sectors and demonstrating the benefits to all sides (see Box 5).
- 79. Leveraging the funds of other sectors is also an important opportunity, picked up by the 2010 Adelaide Statement on Health in All Policies which called for "incentives" and "budgetary commitment" to help public agencies work together on "integrated solutions" Indeed, public health agents need to become increasingly skilled in persuading other sectors to fund health-improving activities by highlighting benefits other than good health outcomes likely to result from their investment, such as learning outcomes, increased productivity, environmental and/or quality of life improvements, and economic returns. For example, investments into water and sanitation systems not only can reduce the burden of disease related to water-borne disease but can make strategic infrastructure resilient to extreme weather events, reducing the risk of disruption of a key service. Similarly, the transport sector's investments into measures that promote safe cycling may result in economic benefits, notably through reduced absence from work due to the improvements to health brought about by regular cycling for commuting ⁵⁶.

56 Oliver Tristan Mytton □, Jenna Panter, David Ogilvie Longitudinal associations of active commuting with

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wellbeing and sickness absence *Preventive Medicine*, Vol 84, March 2016, Pages 19-26 (https://www.sciencedirect.com/science/article/pii/S0091743515003837?via%3Dihub, accessed on 28 June 2018)

Adapted from: ⁵⁷, ⁵⁸.

Box 5: Prioritising Health in Policy (HiAP) Discourse

Bearing in mind, first, that areas in which HiAP can be applied should be subject to the following criteria: problem / issue is of major public health importance; problem / issue is amenable to change and change is feasible (i.e., there is sound evidence about how it can be tackled); and potential solutions are politically and culturally acceptable, argumentation in favour need to address:

- 1. The health argument: Health has an intrinsic value, and is a priority for people. For this reason governments can and should support public sector engagement in this area.
- 2. The health-to-other-sector argument: Improved health and equity can support realisation of mandates and goals of other public sectors through the pursuit of this action.
- 3. The health-to-societal-goal argument: Improved health and equity through this action can contribute to wider societal gain, including well-being, economic and social development and financial and environmental sustainability; also generating support / confidence in public decision-making.
- 4. The economic argument: Stressing the contribution to wider economic goals through improved health and equity resulting from this action.
- 80. Simply allocating more resources for health from the general government budget is a preferable way to increase funding for public health action, if it is coupled with strong priority-setting approaches, which address conflicts which often arise among sectors when negotiating budget allocations. Besides an expansion of fiscal space, there are two additional mechanisms to ensure that cost-effective, efficient and value for money public health interventions are well funded. The first one involves moving towards more explicit and transparent priority-setting approaches applied to the resources already allocated to health, taking into account agreed policy directions. The second direction is to identify and address inefficiencies in health systems and withdraw spending from activities which do not deliver benefits or, worse still, cause harm or could be delivered at lower cost. In general, moving in these directions requires investment in long-term fiscal dialogue, strengthening of budget processes, and re-balancing budget allocations to different sectors.

Embrace systems approaches to cope with complexity and uncertainty

81. Public health policy-making is a complex and non-linear process⁵⁹. This complexity in public health issues requires a holistic systems approach, with real-time evaluation and feedback, where the need for scientific evidence and analysis must be set against the social and political context of growing complexity, unpredictability and ambiguity. Importantly this

http://www.euro.who.int/__data/assets/pdf_file/0007/188809/Health-in-All-Policies-final.pdf
 WHO (2015). Health in All Policies Training Manual. Geneva:

WHO.http://apps.who.int/iris/bitstream/10665/151788/1/9789241507981_eng.pdf?ua=1

⁵⁹ Diez Roux AV. Complex systems thinking and current impasses in health disparities research. Am J Public Health. 2011;101(9):1627–34. doi:10.2105/AJPH.2011.300149.

requires the development of capacities to take decisions in this context, particularly when this would call for a precautionary approach in the interest of protecting public health.

Use information to inform decisions

- 82. The analysis of reliable and timely health information is the foundation of effective public health action. Health information systems provide knowledge about the health status of the population and surveillance for health hazards and disease, as well as the performance of the health system itself. These are essential for policy-makers to gain a reliable and realistic picture of the health situation in their country and to understand the determinants that influence the health and well-being of the population. They are also necessary for target setting as part of health and development policies and objectives and for monitoring progress towards their achievement, thereby strengthening accountability mechanisms and allowing for corrective measures to be taken, if necessary. Building an efficient and robust health information system, that can produce reliable quantitative health data, should therefore always be a priority of any government.
- 83. However, in order to capture the full range of health concerns and ultimately change public health outcomes health data and information need to also reflect the social, political, environmental, commercial and cultural determinants and contexts of the populations that are being described. Ultimately, if policy-makers are to gain a deeper understanding of factors that influence public health, detailed analyses are required that attempt to describe why policies and interventions are (or are not) effective (see Box 6). As the forthcoming European Health Report 2018 will demonstrate, qualitative health information, gathered from a wider, more multidisciplinary range of sources such as ethnographic surveys, photo voice techniques, forum theatre, historical analysis, cultural studies and "big data" sets, can often help to provide the necessary context behind a health challenge (or health opportunity).

Box 6: Understanding the cultural contexts of the United Kingdom's public health response to re-emergent rickets among British Asians in 1960s

In the early twentieth century, rickets in the United Kingdom was regarded as a disease of inner-city infants and children, caused by environmental and lifestyle factors such as the proliferation of industrial slums, poverty, and the decline of breast-feeding.

Freighted with political significance as a marker of inequality, rickets was successfully targeted at the population level by highly interventionist nutrition policies during World War Two. However, from the 1960s and onwards, the public image and political meaning of rickets has changed dramatically with its re-emergence among British Asian adolescents and young women.

While some researchers attributed the return of rickets to continued income inequalities and declining nutritional intervention, others stressed the (presumed) impact of religion on dietary and clothing choices amongst immigrant communities. These attributions reflected political positions as well as clinical findings. In the absence of professional consensus, efforts to eliminate rickets were delayed, diminished and limited to education-only interventions.

The public health responses to nutritional rickets in twentieth century Britain demonstrate how the perception of causes of a disease can directly affect the strategies deployed in responding to it, and can operate independently from medical evidence. Using government files, medical and media reports and oral history, historical studies have revealed the ways in which medical, political and popular

understandings of rickets and assessments of its prevalence in certain communities were strongly influenced by wider cultural, political and economic anxieties about immigration and pressures on the health service (1,2).

These studies are a reminder of the changing perceptions of mass medical interventions. They show how not-validated assumptions about the cultural causes of a politically-charged condition prevalent among a socially stigmatized group can shape public health responses. Close attention to the political and cultural meanings attributed to specific health conditions is therefore necessary to understanding how public health interventions are selected, implemented and assessed for efficacy (3).

Sources

- 1. Bivins, R.E. (2015) 'Ideology and Disease Identity: The Politics of Rickets, 1929-1982', Medical Humanities, 39.2 (Dec 2013).
- 2. Bivins, R.E. (2015) Contagious Communities: Medicine, Migration, and the NHS in Post War Britain (Oxford: Oxford University Press).
- 3. Bivins, R.E. (2016) Re-writing the 'English disease': Migration, Ethnicity and 'Tropical Rickets', in Mark Jackson (ed.), The Routledge History of Disease (London: Routledge).
- 84. Addressing current and future of public health challenges therefore requires a revision of the ways health information is gathered, in order to engage with the full complexity of public health determinants and contexts, as well as the subjective, lived experience of the people whom public health professionals and policy-makers are committed to serve.

Develop strong public health infrastructure

- 85. A new conceptualization of public health has particular implications for infrastructure, implying the need for a greater sense of shared purpose among relevant institutions and sectors, and for a greater global perspective in education and training. The required infrastructure is necessarily diverse and extensive, covering both State and non-State actors.
- 86. Infrastructure arrangements are a critical element in the delivery of effective public health services. Much of the physical infrastructure that supports public health and environmental health came into being as a response to rising mortality levels associated with rapid urbanization in the 19th century. Successful at the time, it now needs to be updated and upgraded to cope with new issues, such as chemical pollution, air pollution medicine residues in waste water, and to be resilient to extreme weather events, while urban transport infrastructure, for instance, needs to be improved to support cycling and walking. These activities not only deliver health benefits through physical activity, but help reducing emissions and alleviating congestions (see box 7).

Box 7: Promoting cross-sectoral partnerships: the Transport, Health and Environment Pan-European Programme (THE PEP)

Established in 2002 by the ministries of transport, health and environment and serviced by a joint secretariat provided by the UNECE and WHO/Europe, THE PEP is a multisectoral policy platform through which Member States work in partnerships to fulfil the vision of "Green and healthy mobility and transport for sustainable livelihoods for all" One of THEP

(https://www.unece.org/fileadmin/DAM/thepep/documents/D%C3%A9claration_de_Paris_EN.pdf, accessed on 3 July 2018)

⁶⁰ THE PEP Paris Declaration, 2014

PEP partnerships, led by Austria and France, aims at the promotion of cycling across the European Region, recognizing and leveraging its multiple health, societal, environmental and economic benefits.

The partnership is currently developing a European Masterplan on Cycling Promotion to make cycling more prominent on the political agenda, and support actions on multiple fronts, including policy, development of infrastructure, improvements to cyclists 'safety, development of monitoring systems and harmonized statistics on cycling and tourism. The Masterplan is expected to be adopted at the Fifth High Level Meeting on Transport, Health and Environment, to be held in Vienna, Austria, on 22-24 October 2019.

- 87. The public health function and public health infrastructure needs a locus. There are two broad requirements: a legal regulatory framework and a surveillance framework. The regulatory framework enforces public health laws and regulations in concert with a spectrum of local and national institutions. Political and social legitimacy are both critical to its success, however, and such legitimacy usually requires public acceptance of the importance of the regulatory framework for economic and social development and a feeling of trust that regulation, implementation and enforcement will be conducted equitably, fairly, transparently and in the best interests of the public. This requires a government programme, supported by parliament, where these issues are addressed. The surveillance framework ⁶¹ will comprise core activities comprising public health surveillance (detection, registration, reporting, confirmation, analyses, and feedback) and acute (epidemic-type) and planned (management-type) responses. Support activities include communications, supervision, training, and resource provision.
- 88. Public health will need to be represented centrally, within ministries of health, and at regional and local levels. Options include a single vertical public health hierarchy, or a more decentralized model with greater local responsibility and autonomy, such as decentralization to structures of local government. These arrangements for the identity and locus of the organization(s) involved will differ from country to country, depending on the context and other prevailing circumstances. Whatever the arrangements, functionally full vertical and horizontal integration is vital.
- 89. Public health should have an independent authoritative voice, and be able to effectively communicate and report independently. Public health needs to work closely with the health services on one hand and derive strength from the health professional health workforce but also with other public institutions health in all policies and implementing the SDGs should not be an excuse to dismantle well-functioning public health institutions and infrastructures.

Build a transformed workforce for public health

90. Effective public health services require structures to create and sustain a workforce with appropriate skills and knowledge. In the 21st century, public health needs a workforce with different qualifications and multidisciplinary skills from those it had before.

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McNabb SJ et al, Conceptual framework of public health surveillance and action and its application to health sector reform BMC Public Health 2002;2:2. Epub 2002 Jan 29. https://www.ncbi.nlm.nih.gov/pubmed/11846889

- 91. Public health is a broad multidisciplinary subject. Several studies^{62,63} have suggested that there are three main groups in a multidisciplinary workforce: all those involved in the broad remit of public health practice, including teachers, town planners, architects and others who do not primarily consider their work as being in relation to public health; those with specific health-professional and clinical functions, with skills in epidemiology, prevention, etc.; and institutionally trained public health specialists and practitioners who can focus on the translation of public health knowledge and evidence into essential public health policies and services.
- 92. The public health workforce has an important role to play as advocates for population health, especially strengthening asset-based approaches and giving voice to those most vulnerable in societies. Working with sectors and communities lies at the core of public health practice, and an important role is to articulate the potential contribution of public health actions to population health and where relevant emphasizing the co-benefits of such actions to the strategic aims of the equitable improvement of population health and wellbeing.
- 93. Public health practitioners need to possess strong interpersonal and communication skills and be able to engage all relevant actors (including communities, NGOs, and social enterprises) and sectors other than health in the design and execution of public health services. Skills such as relationship-building, influencing, negotiating and political astuteness will be important, although they are often the hardest to acquire and deploy effectively. Leadership will be not only individual or positional, but also institutional, distributed, engaged, collective, community-centred, place-based and collaborative within supportive national and international networks.
- 94. The broad public health function includes specialist capacity and staff providing many technical public health services. Strategic and systematic investment in the planning, development and training of the public health workforce is therefore paramount to achieve sustainability in public health service delivery and operationalize public health initiatives and programmes across all sectors. The composition, location, competence and quantity will be country-specific based on the burden of disease and the specific establishment of the health system.
- 95. Public health specialists and practitioners will be able to function effectively across the broad scope of public health practice with strong system leadership skills and the capacity to act as change agents to drive the public health agenda at national, regional and local levels. Emerging competencies required for the public health specialist of the future include: system thinking and systems methods; communication capacities and capabilities; entrepreneurial orientation; transformational ethics; and policy analysis and response64
- 96. The public health workforce requires systematic development, involving sustainable public health workforce planning, sustainable strategic investment and institutional capacity and capability to deliver. Continued professional development (CPD) opportunities and

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⁶² Centre for Workforce Intelligence and Royal Society for Public Health. Understanding the Wider Public Health Workforce. London: Centre for Workforce Intelligence; 2015

⁽https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/507752/CfWI __Understanding_the_wider_public_health_workforce.pdf, accessed 22 May 2018).

Report of the Chief Medical Officer's project to strengthen the public health function. London: Department of Health; 2001.

attractive career pathways should form part of the package to attract the best candidates. Public health should be an attractive career opportunity.

97. National institutes, that provide evidence informed leadership, expertise, and coordination for a country's public health activities⁶⁵, and schools of public health, universities, medical schools, and wider academic and collaborative networks play a major role in public health workforce development, as centres of knowledge, expertise, research, postgraduate and continuing education, and capacity-building. Their establishment and maintenance should be actively supported. (Box 8)

Box 8 The Academy of the National Institute for Public Health and the Environment of the Netherlands (RIVM)
The point of departure RIVM is that the institute's strategy can only be implemented if its employees have the appropriate knowledge and skills. RIVM's strategy starts from core values such as 'at the heart of society' and 'trusted advisor'. Six strategic topics have been defined (the six columns in the lower part of the figure). The Academy actively supports employees to learn during the day-to-day work, with and from colleagues. Through 'learning pathways' and 'action learning projects' different groups of employees (advisors, experts, laboratory employees and managers) together explore – across the organization – what the strategy means for them and their daily work. This further strengthens the skills of professionals who are able to look beyond the boundaries of their own discipline.

National Public Health Institutes Core Functions & Attributes (http://ianphi.org/ includes/documents/core-functions.pdf, accessed on 29 June 2018)

- 98. Schools of public health also have an important role to play in familiarizing students with the vision, aims, objectives and main fields of public health action, creating a wide range of educational opportunities for the expansion of health literacy and understanding among both health professionals and the public.
- 99. Educational facilities should be able to produce health workers who have acquired and can utilize the latest environmental health knowledge and insights, and who bring a modern population health perspective to their work. This has implications for infrastructure, implying the need for a greater sense of shared purpose among relevant institutions and sectors, and for a greater global perspective in education and training.
- 100. There is a strong evidence-based rationale for capacity-building of subnational structures and communities and their empowerment and active engagement as part of a strategic response to reduce health inequalities.66 Implementation networks, such as the WHO European Healthy Cities Network, the Healthy Schools Network, the European Network for Workplace Health Promotion, and the Health Promoting Hospitals and Health services Network, create opportunities to address the co-clustering of health determinants in ways that may be more difficult to achieve at the national level.
- 101. Increases in knowledge also contribute to changes in public awareness and behaviour. When the general public is presented with and encouraged to assimilate contemporary public health knowledge, it can only facilitate the implementation of environmental health policy and improve population health. This may require adapting communication targeting the general public to the changing information context. The major social and economic changes that are needed to secure health, well-being and human survival likely demand buy-in by an informed public, which may necessitate the use of new and innovative channels in addition to formal public health programmes.

Making it happen: a ten-point action plan

- 102. Countries may wish to review their public health governance, infrastructures, capacities and services in the light of the concepts and directions for action highlighted in this document, taking into account the national context.
- 103. Urgent actions to be considered by the Member States include:
 - 1. Establish clear leadership and accountability for public health at the political level, with the engagement of the President and Prime Minister and parliamentary legitimacy. This should aim at the development of strong, well-resourced and fit-for-purpose public health frameworks, supported by clear institutional bases and adequate human resources and capacities.
 - 2. Ensure coherence across national public health strategies and policies, and their alignment with national policies for sustainable development and the achievement of the SDGs. This should address the determinants of health across all policy sectors. It should also aim at reducing

⁶⁶ South J, Connolly A, Stansfield J, Johnstone P, Henderson G, Fenton K. Putting the public (back) into public health: leadership, evidence and action. J Public Health (Oxf). 2018:1–8. https://doi.org/10.1093/pubmed/fdy041.

inequalities in health, particularly in vulnerable groups, following gender-sensitive and participatory approaches

- 3. Review the institutional frameworks for public health action, and provide the necessary resources to strengthen the capacity of public health actors, within health systems and across other relevant sectors.
- 4. Establish or strengthen effective intersectoral mechanisms for addressing all health determinants, particularly the environmental, social, economic, cultural, commercial and behavioural determinants, across policy sectors. This should include local multi-sectoral collaboration e.g. at city or community levels. At the urban level, this means making cities more livable and health-promoting. including by providing safe and clean public transport, opportunities for active mobility, good building rules, as well as accessible and good quality green and blue spaces
- 5. Effectively engage with all relevant sectors, civil society, local actors and stakeholders, including, where appropriate, the general public and the private sector, and empowering communities to take effective actions to protect and promote health. This requires affirming the supremacy of public interest when engaging with the private sector, addressing potential conflicts of interest.
- 6. Step-up investments into effective public health interventions, addressing inefficiencies and increasing the value achieved for the money invested. This should include using financial instruments to correct distortions in the market and promote and protect health, such as fiscal incentives to promote health and disincentives to prevent or reduce health risks, such e.g. taxes and subsidies on consumers' products.
- 7. Support and strengthen institutional capacities for the generation of evidence, health data, information, tools and methods to support evidence-informed policy-making and decision-making, implementation and monitoring of results. This would entail putting in place a transparent accountability system for measuring efficiency and effectiveness of actions and progress through relevant indicators. It would also mean prioritizing public health polices for which strong scientific and practical evidence exists of cost-effectiveness. Examples include environmental protection, restrictions to the marketing of tobacco, unhealthy food and drink products; urban planning; improvements to the environmental sustainability of health systems.
- 8. Develop a new fit-for-purpose public health work-force, within and beyond health systems, by investing in training and continuous development of human resources. This should result in the strengthening of capacities in areas such as policy, political and strategic analysis, capacity to undertake health and health equity impact assessment, political astuteness, and influencing and negotiating skills.
- 9. Empower people to make healthy decisions for themselves and their families, promoting knowledge, health literacy, social values and ensuring resources through social and welfare provision, and provide physical, societal and commercial environments that facilitate healthy choices.
- 10. Work in collaboration with international, intergovernmental and nongovernmental organizations, including United Nations agencies, user associations, family associations and professional associations, to support the implementation of these action points. This would include strengthening the use of already existing regulations and policy frameworks, both at the national and international level. Examples include the Framework Convention on Tobacco Control, and the many Multilateral Environmental Agreements, such as relevant UN Conventions, to which most Member States are Parties.

104. WHO stands ready to support Member States' efforts, by providing leadership, supporting advocacy efforts, providing technical advice and support at the national and subnational level, as needed, including through the development of tools and guidance, the production of evidence and by facilitating exchanges of knowledge, experiences and good practices, and working in partnership with United Nations agencies and other organizations and relevant stakeholders.