

Evidence Brief: Public health

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Produced by the Knowledge Management team Evidence Briefs offer an overview of the published reports, research, and evidence on a workforce-related topic.

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Key publications – the big picture

[Strategy for developing the UK specialist public health workforce 2025 - 2030](#)

Faculty of Public Health, February 2025

This framework for a UK Public Health Specialist Workforce Strategy, developed in partnership with the main UK public health partners, sets out a number of principles, priorities and actions that we believe can be taken to address these challenges and build a specialist public health workforce that is fit for the future.

[The public health workforce](#)

Faculty of Public Health (no date)

The primary responsibilities of the public health workforce are to prevent disease prolong life, and improve the overall health of communities.

[The public health workforce explained](#)

Health Careers (no date)

The three main employing sectors in public health are:

- public sector - local government, the civil service, the NHS and higher education
- private sector - private and independent companies, organisations and consultancy firms
- third sector - charities or social enterprises

[Options for a future public health system in England](#)

The Health Foundation, October 2024

We describe what is and is not working within the current national and regional public health system in England. To understand the existing system, we reviewed relevant literature and interviewed leaders and policymakers across public health and other government departments. Based on these, we identify four key structural challenges: the system is fragmented; there is

a perceived absence of system leadership; there is a lack of political independence, and there is limited cross-government coordination.

[The Unusual Suspects: Unlocking the Potential of the Wider Public Health Workforce](#)

Royal Society for Public Health, March 2024

The wider workforce is a highly diverse group made up of a range of professionals who carry out functions in health protection, health promotion and prevention. This includes pharmacists, the emergency services, allied health professionals, pest control workers, sports and fitness specialists and town planners amongst many occupations.

By focussing on the value of those not traditionally thought of as part of public health – the wider public health workforce – we can use their skills to address some of the challenges we face. RSPH have been engaging with the wider public health workforce to gather evidence and insight on the public health they do, the challenges they face and what would support them to further develop their public health skills and knowledge.

[National workforce capacity to implement the essential public health functions including a focus on emergency preparedness and response: Roadmap for aligning WHO and partner contributions](#)

WHO, 2022

Many countries do not have a dedicated public health workforce policy or plan, or their plans have limited linkage to national health sector strategic plans, national action plans for health security and other disease-specific plans. In order to strengthen public health and emergency capability, it is important to understand the centrality of the public health workforce to their delivery. Monitoring the composition of the workforce which delivers the EPHFs (which includes a specific function and focus

on EPR) is a key element of public health workforce planning to ensure the development of national capacity. It is important to avoid fragmented investments and efforts in building workforce capacity and instead utilize a system approach to ensure that the workforce is adaptive, agile and fit for purpose to meet diverse, ongoing and future public health challenges.

[The art of the possible: The role of the NHS in improving health](#)

The Health Foundation, March 2019

We have identified four ways in which we think the NHS can make a positive difference on health and wellbeing: as a direct provider of health care, as an employer, as an anchor in the community, and as a system leader and partner.

Case Studies

[Exploring the work and organisation of local Healthwatch in England: a mixed-methods ethnographic study](#)

Health and Social Care Delivery Research, October 2022

We found significant variation in the organisation and work of Healthwatch organisations nationally, including hosting arrangements, scale of operations, complexity of relationships with health and care bodies, and sources of income beyond core funding. Key points of divergence that were consequential for Healthwatch activities included the degree of autonomy from host organisations and local understandings of accountability to various constituencies. These points of divergence gave rise to very different modes of operation and different priorities for enacting the nationally prescribed responsibilities of Healthwatch organisations locally. Large variations in funding levels created Healthwatch organisations that diverged not just in scale but in focus. As the COVID-19 pandemic unfolded, Healthwatch found new approaches to giving voice to the views of the public and formed effective relationships with other agencies.

[Are allied health professionals the next major public health workforce?](#)

UK Health Security Agency, April 2014

What needs to happen to make the most of AHPs' potential to boost our public health efforts? The professionals need to act but they also need support from commissioners and academics.

The sort of action needed include:

- From allied health professionals: If you are already doing public health work, talk about it, evaluate it and think how you could do more. If you aren't doing this work, consider how you could build a public health element into your current role
- From service planners and commissioners: Are you getting public health value from your contracts, have you discussed with your providers how they could support the wider prevention agenda? Public health commissioners could consider whether AHPs should be part of commissioning plans

From academics: Educators need to ask if their curriculum includes proper attention to public health and prepares the future workforce for a wider role. Researchers need to ask if they can publish more on the potential impact of AHPs on public health. Leadership across all these sectors is needed if we are to drive the expected change.

The Star for workforce redesign

More resources and tools are available by searching [the Star](#) for **“public health”**

Statistics

You can find relevant statistics on the [Health and Care Statistics Landscape](#) by search for "public health"

National Data Programme

Workforce, Training and Education staff can look at the [National Data Warehouse \(NDL\)](#) SharePoint site to find out more about datasets and Tableau products.

Published Peer Reviewed Research

New ways of working

[The role of health protection teams in reducing health inequities: findings from a qualitative study](#)

BMC Public Health, February 2023

Although many challenges, there was an appetite and enthusiasm to address health inequity within health protection, and UKHSA's HPTs have a role in this. Recommendations include:

- development of a Health Equity Strategy which sets out the remit and expectations of HPTs and the wider UKHSA
- take a more holistic health protection approach to support populations most in need
- embed health equity into business-as-usual
- develop the workforce through skills audit and health equity training

[Professionalism of the public health workforce – how to make it happen?](#)

Journal of Public Health, November 2022

Public health has the attributes required to be defined as a profession. The majority of countries in the European Region provide specialized public health education. Schools of public health provide training to the wider PHW including undergraduate and post-graduate education and training including via short continuing education courses. The ASPHER and the Agency for Public Health Education Accreditation have put together standards for quality assurance in public health education, based on competencies developed to guide the curriculum delivered by schools of public health and to guide PHW and systems development.

[Reforming the public health system in England](#)

The Lancet Public Health, September 2022

The respective remits of UKHSA and OHID need to be clearer and more transparent if fragmentation is to be avoided. A feature of PHE, and one widely welcomed by the public health community, was its attempt to bring together and integrate the key public health functions that had previously operated in separate silos.

Education and training

[Is Public Health Education and Training Adequately Responding \(or Not\) to Emerging Priorities?](#) Abstract only*

Pedagogy in Health Promotion, December 2024

Recent work by the World Federation of Public Health Associations' Professional Education Training (WFPHA PET) working group has identified five emerging areas (OneHealth, Systems Thinking, Public Health Ethics, Political Engagement, and Disaster and Emergency Health) within the discipline of public health that practitioners need to have a basic

understanding to prepare themselves for the future of the field. However, these areas are not necessarily included in public health competency sets or curricula globally.

[Implementing evidence ecosystems in the public health service: Development of a framework for designing tailored training programs](#)

PLoS ONE 19 (4), April 2024

This study aimed to develop a toolbox that serves as a guide to develop training programs to equip public health professionals and researchers with the knowledge, skills, and capacities relevant to implementing evidence-informed approaches at the interface of academia and practice. Training programs that are explicitly tailored to local needs have the potential to foster a shared research culture focusing on topics relevant for the PHS and establish a sustainable cross-institutional infrastructure known as a local evidence ecosystem.

[Developing public health competency statements and frameworks: a scoping review and thematic analysis of approaches](#)

BMC Public Health, November 2023

The review scopes and analyzes the literature on developing competency statements and frameworks for public health. The findings highlight the similarities in approaches for developing competency statements and frameworks across studies, including using a multi-step process that involves literature reviews, expert consultations, and consensus-building.

[Strengthening capacity through competency-based education and training to deliver the essential public health functions: reflection on roadmap to build public health workforce](#)

BMJ Global Health 8 (3), March 2023

The roadmap sets out an ambitious agenda for countries to build a strengthened workforce. For these aspirational aims to be

realised, the roadmap requires the support of a broad coalition of partners and stakeholders with diverse expertise. Inclusion of young professionals in decisions about education and training will enable these future leaders to engage in policy developments and inform public health structures that will shape their careers and the future of health service delivery. The unique position of students and ECPs within complex health systems affords them an appropriate vantage point from which to engage in curriculum and social wellness debates. It is important that the career stage of individuals is not erroneously linked to their level of competence.

[Evaluation of the UK Public Health Skills and Knowledge Framework \(PHSKF\): implications for international competency frameworks](#)

BMC Public Health 20 (956), June 2020

The current study has evaluated strengths and weaknesses of the UK PHSKF, and represents one of the few evaluations of public health competency frameworks in international contexts. It has highlighted that the PHSKF has potential to generate a positive impact among the UK public health workforce. Several implications for the UK and international contexts emerged. First, it is important to enhance buy-in from managers and workforce; second, clarifications of purpose and target audience of the framework are crucial; and third, development of a digital version and related digital tools could improve the success of public health competency frameworks. Further evaluation of public health competency frameworks are needed to support global public health workforce development.

[The applicability of the UK Public Health Skills and Knowledge Framework to the practitioner workforce: lessons for competency framework development](#) Abstract only*

Journal of Public Health 41 (1), March 2019

The overall framework was seen positively although no participants had previously read or utilized the PHSKF. Most could provide evidence, although some PHSKF competencies required creative thinking to fit expectations of practitioners and to reflect variation across the domains of practice which are impacted by job role and level of seniority. Evidence from previous NHS jobs or education may be needed as some competencies were not regularly utilized within their current local authority role.

[Educating the Public Health Workforce: A Scoping Review](#)

Frontiers in Public Health, February 2018

The aim of this scoping review was to identify and characterize the recent literature pertaining to the education of the public health workforce worldwide. Champions for public health note that a suitably educated workforce is essential to the delivery of public health services, including emergency response to biological, manmade, and natural disasters, within countries and across the globe.

Workforce development

[Scope of public health workforce: an exploratory analysis on World Health Organization policy and the literature](#)

Global Health Journal, December 2024

The public health workforce is a key component of public health system. To articulate the scope of public health workforce, we reviewed the relevant World Health Organization (WHO) guidance and peer-reviewed journal articles on this subject. Specifically, we assessed and compared the relevant publications produced by WHO Headquarters and Regional

Offices along with other literature on this issue. Our focus was on the “occupation, workplace setting, and employer of public health workforce”. It is noteworthy that WHO has adopted a conceptual framework with an inclusive scope of the public health workforce, while setting out a 5-year vision to strengthen capacity across all WHO Member States for a multidisciplinary workforce to deliver the essential public health functions, including emergency preparedness and response.

[A Systematic Review on Professional Regulation and Credentialing of Public Health Workforce](#)

International Journal of Environmental Research and Public Health, January 2023

The review presents specific professional regulation and credentialing approaches without favoring one of the proposed methods. Our review was limited to articles focused on professional credentialing and regulation of the PHW in the specialized literature published in English and did not include a review of primary PHW development sources from international organizations. The process and requirements are unique processes displaying knowledge, competencies, and expertise, regardless of the field of practice. Continuous education, self-regulatory, and evidence-based approach can be seen as common characteristics for the performance standards on both community and national levels. Certification and regulation standards should be based on competencies that are currently used in practice. Therefore, answering questions about what criteria would be used, what is the process operation, what educational background the candidate should have, re-examination, and training are essential for a competent and responsive PHW and could stimulate the motivation of the PHW.

Creating a robust multidisciplinary public health workforce — almost there?

Journal of Public Health, November 2022

The pandemic may have raised the visibility of public health – ‘everyone’ now knows about our core science of epidemiology. It emphasised, however, pre-existing issues of limited public health capacity and skills gaps. Remote working and the application of essential data and evidence showed the need for improved health intelligence and technology systems. The Northern Ireland Public Health Agency, in its annual business plan for 2021–22, acknowledged the need to increase health protection capacity with early workforce planning to improve skill mix and provide better opportunities and career structures for staff recruited. Scotland reported in 2021 on difficulties in recruiting to key public health specialisms (unspecified) and a need for better succession planning. The LGA highlighted in early 2021 what it considered the fault lines in the current public health system in England:

- the lack of health protection capacity during the pandemic
- limited data and intelligence
- poor understanding of roles and responsibilities, levers and powers.

How do you develop systems leadership in public health? Insights from a scoping study Abstract only*

Public Health, June 2021

Systems leadership is widely acknowledged to be needed to address the many 'wicked issues' challenging public health systems. However, there is a lack of evidence on how to develop public health professionals into effective systems leaders. This study scoped the possibilities for developing the systems leadership capacity of public health specialists in England.

Four main themes were identified: the nature and purpose of systems leadership; development needs and opportunities for

public health specialists; the enabling environment; and wider contextual factors impacting public health.

No Two Workforces Are the Same: A Systematic Review of Enumerations and Definitions of Public Health Workforces

Frontiers in Public Health, November 2020

The delivery and coordination of public health functions is essential to national and global health, however, there are considerable problems in defining the people who work in public health, as well as estimating their number. Therefore, the aim of this systematic review was to identify and explore research which has defined and enumerated public health workforces. In particular, how were such workforces defined? Who was included in these workforces? And how did researchers make judgments about the size of a workforce?

Education, training, and experience in public health ethics and law within the UK public health workforce Abstract only*

Journal of Public Health 42 (1), March 2020

Public health ethics and law (PHEL) is a core professional competency for the public health workforce. However, few data are available describing the extent to which UK public health workforce members experience ethical and legal issues or have sufficient educational and/or training background to adequately deal with such issues.

Is there a golden recipe? A scoping review of public health workforce development

European Journal of Public Health, June 2019

The study identifies a set of common elements based on plans or tools that are successfully used and applied in a wide range of countries with different PH systems. The framework created by these nine measures can begin to approach a ‘golden recipe’ for PHW development and planning. Such tool may be adopted in accordance with the specific statutory environment and

circumstances of a particular country, its health system organization and structure, as well as the current burden of disease and population health profile. Overall, all of these measures are essential ingredients to cultivate or modernize the PH system and ensure successful development of an effective PH workforce.

Directors of public health as ‘a protected species’: qualitative study of the changing role of public health professionals in England following the 2013 reforms

Journal of Public Health, September 2018

This study finds that those public health staff who transferred to local government cannot assume that their specialist skills will automatically be understood or valued. They therefore need to develop and make full use of a range of soft skills if they are to be successful advocates and leaders for the improvement and protection of public health. This study also finds that although the PHSKF provides a much needed resource now that public health is ‘everyone’s business’, if councils are to develop staff to UKPHR registration level, opportunities are needed for them to receive specialist training and gain experience in specialist settings. This necessitates tackling the ‘regulatory blocks’ which currently deter career moves between organizations.

Developing the public health workforce: training and recognizing specialists in public health from backgrounds other than medicine: experience in the UK

Public Health Reviews, June 2018

The transition from a predominantly medical to a multidisciplinary public health specialist workforce over a relatively short timescale is unprecedented globally and was the product of a sustained period of grass roots activism aligned with national policy innovation. The UK experience might provide a model for other countries seeking to develop public health specialist

workforce capacity in line with the Essential Public Health Operations.

Building Capacity for Evidence-Based Public Health: Reconciling the Pulls of Practice and the Push of Research

Annual Review of Public Health, April 2018

Timely implementation of principles of evidence-based public health (EBPH) is critical for bridging the gap between discovery of new knowledge and its application. Public health organizations need sufficient capacity (the availability of resources, structures, and workforce to plan, deliver, and evaluate the preventive dose of an evidence-based intervention) to move science to practice. We review principles of EBPH, the importance of capacity building to advance evidence-based approaches, promising approaches for capacity building, and future areas for research and practice.

Equality, diversity, and inclusion

A diverse public health workforce is more important than ever

BMJ, February 2023

The covid-19 pandemic provided an opportunity to learn and rethink what a well equipped public health workforce looks like. To tackle health inequalities meaningfully and build long term trust with deprived communities in the UK, we must first confront inequities and biases in our own profession.

Equality, diversity and inclusion in recruitment to Public Health specialty training in the United Kingdom

Faculty of Public Health, November 2022

The applicant pool for Public Health is highly diverse. There was no evidence to suggest that interviewers were unfairly discriminating against minoritised groups. There was no evidence that first language or socioeconomic status was associated with success. The main point-of-loss for some

candidate groups appears to be within the psychometric testing stage. Candidates from ethnic minority backgrounds, those who are older, those from international medical graduate backgrounds and backgrounds other than medicine are materially under-represented by the end of the process. After statistical adjustment these patterns remain, leading to the conclusion that differential attainment is present in the process.

Impact of COVID-19

Moral distress and injury in the public health professional workforce during the COVID-19 pandemic

Journal of Public Health, March 2023

Our findings, taken together with the existing literature, demonstrate that moral distress and injury are indeed significant problems in the UK public health professional workforce, and have been exacerbated by the COVID-19 pandemic. This is concerning both as a possible indicator of injustices perpetrated during the pandemic, and as a threat to the wellbeing of the workforce, and thus demands urgent attention. It has major policy implications, though further work is needed to understand the specific causes of and potential solutions to this moral distress, and the possible role of ethical training in preventing and mitigating its impact.

Covid-19: Decision-Making in Public Health Abstract only*

Journal of the Royal College of Physicians of Edinburgh, December 2021

Against a background of stalling UK life expectancy, the COVID-19 pandemic necessitated a different way of working for public health to respond quickly to new and many demands. At the same time, public health teams had to ensure they did not concentrate on the immediate crisis at the expense of mitigating longer-term impacts of the pandemic. This was, and is, a major challenge with additional demands on an already hard-pressed

workforce. This paper discusses the experience of a local public health department in responding to the pandemic and raises four key areas that influenced decisions and need to be considered in future. These are care homes issues, addressing all four harms of the pandemic, lessons for behaviour change and the need to strengthen Scotland's public health workforce.

Ethics

Creating codes of ethics for public health professionals and institutions

Journal of Public Health, January 2025

The creation of a code of ethics should be followed by the identification and building of ethical competencies and capacity for public health professionals and institutions. There are plans to collaborate with pilot sites in the use and generation of further learning, and additional assistance for competencies and other resources to support a code of ethics and competencies.

The Emergence of AI in Public Health Is Calling for Operational Ethics to Foster Responsible Uses

International Journal of Environmental Research and Public Health, February 2023

In this paper, we first provide a concise summary of the similarities and differentiation between clinical and public health ethics to consider in shaping a global ethical approach to Artificial Intelligence (AI) systems (AIS). Then, we provide an overview of AI applications based on their purpose of use in public health, and of their expected benefits and potential risks. We identify and analyse key principles stated by different ethical norms for envisaging responsible development and use of AIS in public health at international and EU level.

Competency Frameworks

[Public Health Practitioner's Education and Training Directory](#)

NHS England, January 2025

This directory aims to enable practitioners, practitioner schemes, and commissioners to:

- identify current education and training available for each of the individual Public Health Practitioner Standards and for the eight areas of public health practice
- appraise which education and training might best suit their needs

[Public Health Skills and Knowledge Framework: August 2019 Update](#)

Office for Health Improvement and Disparities, February 2023

The PHSKF is a framework that describes the functions and activities carried out by people working to protect and promote the public's health across the UK. The framework is used by employers to identify strengths or gaps in their capabilities as teams and organisations to design job descriptions for recruitment.

[Competencies for dental public health specialists: A thematic analysis](#) Abstract only*

European Journal of Dental Education, December 2022

Competency frameworks have been used to accurately guide the training and assessment of professionals. Dental Public Health professionals require a variety of skills beyond clinical aspects to meet ongoing social, economic, epidemiologic, technological, etc. developments. The purpose of this study was to develop a primary competency framework for dental public health (DPH) professionals by reviewing existing documents that can be modified by authorities based on their needs.

[Public health and emergency workforce: A roadmap](#)

World Health Organization, October 2022

Achieving and sustaining progress towards global health goals such as universal health coverage and health security requires a health and care workforce that can deliver the full range of essential public health functions, including emergency preparedness and response. As countries recover and turn attention to investments in health systems to meet diverse challenges, now is an opportune time to bolster the public health workforce, including those personnel charged with emergency preparedness and response functions. This roadmap is the result of joint efforts across leading public health and emergency response experts, organizations and associations.

[Frameworks and guidance to support ethical public health practice](#)

Journal of Public Health, March 2020

It is evident that there is need for clear articulation of the skills and knowledge necessary for all practitioners of public health, including those related to ethics. Clearly defined frameworks and guidance documents are a good first step to reiterating established requirements and competencies—as well as solidifying key principles, concepts and values for the public health workforce. While efforts to promote greater awareness of the PHSKF and PHEIP documents would support these efforts, there is also a greater need for public health ethics knowledge, skills, attitudes and values to be integrated more widely into the day-to-day activities of public health professionals and the skills and knowledge requirements within public health education programmes and training opportunities. Frameworks and guidance documents will not be sufficient on their own, especially given the initial evidence from the survey of reported access to these materials. A more comprehensive, multifaceted and sustained approach is needed to help ensure and support ethical public health practice.

Good Public Health Practice Framework

UK Public Health Register, 2016

This guidance provides the basis for good professional practice in public health. It applies to all members of the core public health workforce, including public health practitioners and specialists and those training to become practitioners and specialists.