

Multisectoral preparedness coordination framework

Best practices, case studies and key elements of advancing multisectoral coordination for health emergency preparedness and health security



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Executive summary

Countries must be better prepared to detect and respond to public health threats in order to prevent public health emergencies and the devastating impact they can have on people's lives and well-being, as well as on travel and trade, national economies and society as a whole. Public health challenges are complex and cannot be effectively addressed by one sector alone. A holistic, multisectoral and multidisciplinary approach is needed for addressing gaps and advancing coordination for health emergency preparedness and health security, and is essential for the implementation of the International Health Regulations (2005).

This document provides States Parties, ministries, and relevant sectors and stakeholders with an overview of the key elements for overarching, all-hazard, multisectoral coordination for emergency preparedness and health security, informed by best practices, country case studies and technical input from an expert group. Those elements form the basis of a multisectoral preparedness coordination framework that will aim to improve coordination among relevant public stakeholders, particularly actors beyond the traditional health sector, such as finance, foreign affairs, interior and defence ministries, national parliaments,

non-State actors, and the private sector, including travel, trade, transport and tourism.

The framework outlined in this document complements the International Health Regulations Monitoring and Evaluation Framework and contributes to the strategic goal in the WHO Thirteenth General Programme of Work of 1 billion more people better protected from health emergencies, and supports the achievement of Sustainable Development Goal 3 – ensure healthy lives and promote well-being for all at all ages. The document discusses key elements for effective multisectoral coordination for health emergency preparedness, including high-level political commitment, country ownership and leadership, and formalizing mechanisms that contribute to multisectoral preparedness coordination. Transparency, trust, accountability, communication and resources will be required for the proper functioning of such mechanisms. Monitoring needs to be intrinsic to the process in order to measure progress in implementing the framework. Context-specific priorities should be considered in developing mechanisms that reflect the different needs and contributions of the relevant stakeholders in order to ensure effective, synergetic multisectoral coordination for health emergency preparedness and health security.

1 Purpose of document

1.1 Scope

Countries must be better prepared to prevent, detect and respond to public health threats in order to prevent public health emergencies and the devastating impact they can have on people's lives and well-being, as well as on travel and trade, national economies and society as a whole. Public health challenges are complex and cannot be effectively addressed by one sector alone. A holistic, multisectoral approach is needed for appropriately addressing gaps and advancing coordination for health emergency preparedness and health security.

High-level political commitment and technical guidance are both necessary for successful multisectoral coordination for health emergency preparedness and health security. The multisectoral preparedness coordination framework focuses on engaging high-level policy-makers and decision-makers in order to ensure a whole-of-government, whole-of-society approach to multisectoral preparedness coordination.

To address this necessity, the World Health Organization (WHO) has developed the present document and will bring together, through its convening role, ministers and high-level decision-makers from relevant public and private sectors in a series of forums and meetings, starting with the High-Level Meeting on Diplomacy for Health Security and Emergency Preparedness co-hosted by the Kingdom of Morocco, the Republic of Rwanda, the World Bank and WHO at the end of 2020 in Marrakesh, Morocco.

1.2 Objectives

This document has the following objectives:

- to enhance collaboration and coordination between the public health sector and all other relevant stakeholders and sectors that may be engaged in and can contribute to advancing health emergency preparedness and health security;
- to provide guidance on critical elements that countries may consider in strengthening multisectoral coordination for health emergency preparedness and health security;
- to highlight a variety of best practices and case studies for multisectoral coordination for

health emergency preparedness and health security, reflecting the need for context-specific variation for effectiveness

1.3 Target audience

This document addresses policy-makers and decision-makers in the public health sector, as well as actors in all other relevant sectors that should be engaged in advancing multisectoral coordination for emergency preparedness and health security. The framework is intended to support high-level stakeholders involved in promoting, engaging in, establishing, strengthening, advancing and monitoring multisectoral coordination.

While most best practices and case studies illustrated in this document reflect the national level, the identified key elements of multisectoral coordination can also apply to the regional and global levels. This framework is neither prescriptive nor does it offer one-size-fits-all solutions, but rather intends to emphasize the need for historical, geopolitical and socioeconomic contextualization. It is also recognized that the requirements for multisectoral engagement in fragile and conflict-affected countries and regions may demand a modified approach.

2 Introduction

2.1 Background

Health emergencies, including disasters, take a heavy toll on populations around the globe (1). Human and animal diseases, chemical, radiological and nuclear accidents, and natural disasters cause ill-health, disability, loss of lives, food insecurity, environmental damage, displacement, and destabilization of trade and economic development, as well as of societies as whole. Diseases can spread, and they can do so even more significantly where health systems are fragile or are faced with newly emerging and re-emerging diseases, as seen in recent outbreaks of Ebola virus disease, Zika virus disease, yellow fever, cholera and COVID-19, affecting entire countries and regions. As a result, health security is high on the international agenda (2). International intergovernmental forums that discuss financial and socioeconomic issues to coordinate global policy – such as the Group of Seven (G-7) and Group of Twenty (G-20) –

emphasize the interlinkages between and support the integration of health system strengthening, country emergency preparedness and health security (3). Health security is a continuous process in which action, financing, partnerships and political commitment must be sustained.

The International Health Regulations (IHR) (2005) represent the legal basis for multisectoral coordination for emergency preparedness and health security. WHO promotes the participation of all relevant sectors to contribute to the improvement of the capacity of States Parties to prevent, detect and respond to public health emergencies of international concern and accelerate the implementation of the IHR (2005) (4). An intersectoral approach is among the guiding principles for implementation of the IHR (2005) set out in a report by the WHO Secretariat to the Seventieth World Health Assembly, May 2017, which states: “Responding to public health security threats requires a multisectoral, coordinated approach (for example with agriculture, transport, tourism and finance sectors)” (5). The IHR (2005) Monitoring and Evaluation Framework (6) provides operational tools for countries to identify strengths, gaps and priorities around health security capacities. In addition, WHO supports countries in conducting national bridging workshops to strengthen collaboration between the animal and human health sectors, and also supports the development of national action plans for health security to address country gaps and needs. WHO, through the Strategic Partnership for IHR and Health Security portal, shares information on country, partner, and donor initiatives, activities, and investments to facilitate coordination and harmonization between all relevant stakeholders.

Under the WHO Thirteenth General Programme of Work 2019–2023 (7), the WHO Health Emergencies Programme has an integral role in contributing to the strategic priority of 1 billion more people being better protected from health emergencies by building and sustaining the national, regional and global capacities required to keep the world safe from health emergencies. In support of implementation of the Thirteenth General Programme of Work and attainment of Sustainable Development Goal (SDG) 3 (8), this document provides evidence-based information on how to establish functional multisectoral coordination, primarily within but importantly also beyond the government structures, for

countries to better prevent, detect and respond to all potential public health threats.

2.2 Definitions, related initiatives and technical documents

WHO defines emergency preparedness as “the knowledge and capacities and organizational systems developed by governments, response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from the impact of likely, imminent, emerging, or current emergencies” (9). Multisectoral preparedness coordination refers to the deliberate collaboration between stakeholders from multiple and diverse sectors and disciplines working towards the shared goal of enhanced health emergency preparedness by leveraging knowledge, expertise, strengths, reach and resources. Successful multisectoral preparedness coordination is dependent on political, economic and social factors, and requires commitment from all stakeholders working together.

The 1978 Declaration of Alma-Ata (10) stated that “the attainment of the highest possible level of health is a most important world-wide social goal whose realization requires the action of many other social and economic sectors in addition to the health sector”. Numerous other publications and resolutions relating to health security have since recommended a multisectoral approach, including the Ottawa Charter for Health Promotion, 1986 (11), the Framework for Action on health system strengthening, 2007 (12), the Health in all Policies analytic framework (13), United Nations General Assembly resolution 67/81 on global health and foreign policy, 2012 (14), and World Health Assembly resolution WHA65.23 on implementation of the International Health Regulations (2005), 2012 (15).

Recent technical documents have also called for improved coordination among sectors, including the report of the United Nations Secretary-General to the Seventieth session of the United Nations General Assembly on strengthening the global health architecture, 2016 (16); the WHO working paper on tackling antimicrobial resistance, 2018 (17); the World Bank operational framework for strengthening human, animal and environmental public health systems at their interface, 2018 (18); the WHO checklist for pandemic influenza risk and impact management, 2018 (19); the WHO country implementation guide for national action plan for health security, 2019 (20); the WHO, Food

and Agriculture Organization of the United Nations and World Organisation for Animal Health tripartite guide to addressing zoonotic diseases in countries, 2019 (21); the WHO Health Emergency and Disaster Risk Management Framework, 2019 (22); and the Global Platform for Disaster Risk Reduction (23). Numerous forums, including the second WHO Africa Health Forum (24), have also called for increasing multisectoral efforts to increase the capacity of country health systems for achieving health security, community and country resilience, universal health coverage and sustainable development.

have acknowledged the need for a multisectoral approach to strengthen national capacities to prevent, detect and respond to long-standing, emerging and re-emerging infectious diseases as well as other threats. Partners working in support of national, regional and global health security include the tripartite alliance of WHO, the Food and Agriculture Organization of the United Nations and the World Organisation for Animal Health (25), other international organizations, development banks, regional organizations, collaboration centres and nongovernmental organizations.

A wide range of international partners and donors supports country health emergency preparedness under various health security initiatives and

Box 1 provides an example of multisectoral preparedness coordination from Senegal.

Senegal: a high-level, multisectoral and One Health approach to health security

The Prime Minister of Senegal established the One Health National High Council for Global Health Security by decree in 2017. The council was created in recognition that multisectoral collaboration, with inclusive involvement of all sectors and coordination at the highest level of government, was the only way to guarantee success in the implementation of the IHR (2005). Experiences with rinderpest, HIV/AIDS, avian influenza, and Ebola virus disease had demonstrated that building strong health security required close collaboration across sectors.

The main mission of the One Health National High Council for Global Health Security is to define the strategic orientations of the global health security programme based on a One Health approach within the framework of the IHR (2005). Primary objectives are to ensure the synergy and complementarity of the human, animal and environmental health sectors to achieve public security, civil security and food security, and to mobilize sustainable funding for the implementation of the health security strategy.

The council, which meets annually, is chaired by the Prime Minister. Other members include ministerial-level representatives from relevant sectors (human health, animal health, environment, agriculture, finance, defence, public security, education, transport and communication).

In carrying out its mission, the council is supported by the following bodies:

- the Steering Committee for Multisectoral Coordination for Global Health Security, comprising representatives of government (Secretary-General, secretaries-general and directors-general of relevant ministries), presidents of national professional associations (physicians, veterinarians, nurses, environmentalists, pharmacists, wildlife conservators), the private sector and civil society organizations, which is responsible for adoption, monitoring and coordinating implementation of the health security annual programme, and meets once a quarter or when necessary;
- the permanent Secretariat;
- the Technical Committee for One Health Multisectoral Coordination, which is responsible mainly for drawing up a consolidated annual multisectoral plan for global health security and ensuring coordination and monitoring of multisectoral preparedness for and response to any human, animal or environmental health threat with national or international impact;
- sectoral committees for multisectoral coordination;
- decentralized committees (local communities) for multisectoral coordination led by the head of the highest authority in the administrative district, which are responsible for coordinating and leading activities at the local level within the framework of the global health security programme;
- the multisectoral thematic groups with respect to the IHR (2005);
- the IHR focal point.

2.3 Need to address gaps in multisectoral preparedness coordination

Frequently, multisectoral coordination is put in place only during the response to a public health emergency, and in most cases is limited to a specific disease or hazard and to the duration of the emergency. This was the case for outbreaks of severe acute respiratory syndrome (SARS), H5N1 avian influenza and Zika virus disease, as well as other outbreaks and major disasters. For reasons of effectiveness and sustainability, it is critical to build viable coordination before the need to respond to an event arises, driven by a culture of and a systematic approach to emergency preparedness and the strengthening of health systems.

Data from the 2018 State Party self-assessment annual reporting (SPAR) (26) questionnaire highlighted the critical need for improving coordination among relevant stakeholders across the various IHR capacities. There are four SPAR indicators that assess capacities specifically related to multisectoral coordination:

- C2.1 National focal point functions under IHR
- C2.2 Multisectoral IHR coordination and mechanisms
- C3.1 Collaborative effort on activities to address zoonoses
- C4.1 Multisectoral collaboration mechanism for food safety events.

The lowest scores for these indicators were in the WHO African, South-East Asia and Western Pacific regions (Figure 1). The highest average score, at 66%, was achieved for indicator C2.1, related to national focal point functions under IHR. Lowest average scores were achieved for indicators C3.1 and C4.1 (58% and 56%, respectively), while 49 of the 183 reporting States Parties scored 60% or less for indicator C2.2 on multisectoral IHR coordination and mechanisms. Furthermore, the joint external evaluation (JEE) indicator “IHR coordination, communication and advocacy” scored an average of only 55% across all six WHO regions (regional variation 39% to 86%) based on 106 JEE reports reviewed in January 2020. This indicator emphasizes the need for a national “mechanism for multisectoral/multidisciplinary coordination, communication and partnerships to detect, assess and respond to any public health event or risk” (27). Among the recommended priority actions based on the results of the JEE in the countries with gaps in coordination, over 50% recommended the development and dissemination of standard operating procedures for the coordination of all sectors (70%) and establishment of a structured and formalized framework for such coordination (60%). Other suggested key activities include the development of a plan for multisectoral coordination, simulation exercises to test levels of coordination, training, and sustainable financing for coordination efforts.

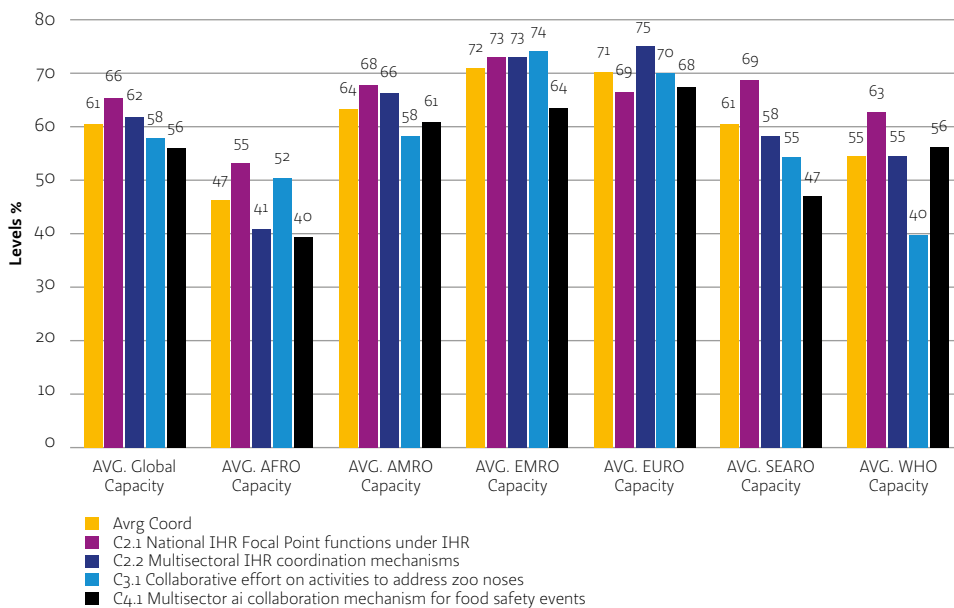


Figure 1. SPAR average scores for selected indicators related to coordination, by WHO region (%)

Multisectoral coordination can strengthen country ownership, accountability, stewardship of resources, and organizational effectiveness around health emergency preparedness, readiness and response. It is important to recognize that the capacity to assist in preventing, detecting and responding to public health risks and health emergencies exists within a wide variety of relevant sectors beyond the human health sector. The consideration of context-specific priorities and leveraged mechanisms that reflect the different needs and contributions of the relevant stakeholders are the pillars of effective and synergetic multisectoral coordination for health emergency preparedness and health security.

2.4 Stakeholders relevant for health emergency preparedness and health security

Human health, animal health and environmental sectors. These sectors – considered together within a “One Health” approach – are identified as key sectors for multisectoral coordination of health emergency preparedness and health security due to the widespread recognition of the impact on human health of zoonotic spillovers and zoonotic diseases (18). Disease outbreaks such as SARS, pandemic influenza A (H1N1), avian influenza (H5N1), Middle East respiratory syndrome, Ebola virus disease and Zika virus disease have been catalysts for the human and animal health sectors to collaborate closely. The animal health and environmental sectors add valuable expertise in the prevention of, detection of, and response to disease outbreaks transmitted from sick animals or contaminated environments (21). Health security in this context is also interlinked with food security, access to safe water and sanitation, and the building and safeguarding of resilient communities and livelihoods. While this cross-sectoral collaboration for health emergency preparedness is already to some extent continuing in many countries, engaging the perspective and functions of One Health stakeholders is essential and needs to be advanced.

Finance sector. Engagement of the finance sector is also crucial, though too often the sector is overlooked as a main stakeholder for successful health emergency preparedness and health security. The ministry of finance plays a central role in planning at all levels and ensuring robust financing of health emergency preparedness and

health security as part of wider health system strengthening. The involvement of ministries of finance in preparing for – rather than only responding to – health emergencies is not only essential but financially sound. The integration of health emergency preparedness priorities into national expenditure frameworks, budgets and sectoral plans, and financing these from domestic rather than international funding sources, are key components of the discussion. The economic impact of health emergencies is devastating. Average annual economic losses of 0.7% of global gross domestic product due to pandemics are projected over the coming decades (28). This is in contrast with the comparatively modest investment required for health emergency preparedness that could yield significant returns.

Foreign policy and international relations.

These have a direct influence on how countries can work together for health emergency preparedness in today’s interconnected world. Epidemics can lead to economic decline, social destabilization and unrest, with implications for national and international security. Travel and trade sanctions imposed by governments on countries affected by outbreaks can harm economies and relations. As viruses and diseases do not respect borders, public health needs to be understood as a decisive factor in international diplomacy, with foreign policy bearing a responsibility for strengthening global health security (29). Health emergency preparedness is a matter of national and global security and is critical in enhancing collaboration on cross-border health security threats. Collaborative foreign policy on global health allows for better access to information, technologies, medicines and vaccines, and improves accessibility to these resources by vulnerable populations. This includes both building up preparedness capacities within countries and enabling access to capacities in other countries when health emergencies occur (for example, access to advanced laboratory testing capabilities). Foreign policy can also serve to mitigate the potential threat to national and global health security of deliberate actions, such as intentional release of biological agents, and can act as a bridge for peace (30). Foreign policy stakeholders have a clear place at the table in discussions on multisectoral coordination for health emergency preparedness and health security.

Ministries of interior and defence. Engagement with ministries of interior and ministries

of defence can contribute significantly to strengthening health emergency preparedness and health security, particularly relating to specific efforts for preparedness of cities and urban settings. Coordination with these stakeholders can provide intelligence, expertise and resources for engaging local infrastructure and authorities, as well as assistance with logistical requirements for responding to complex public health emergencies. In addition, these ministries are crucial for the mitigation of such public health threats as chemical, biological, radiological and nuclear incidents, whether intentional or otherwise. While the mandate of the national military and medical armed forces in many countries is to provide assistance in case of emergency, their expertise can also be systematically leveraged for national health emergency preparedness (31, 32).

National parliaments. While the sectors of the public administration are vital actors in strengthening health emergency preparedness and health security, all other public sectors may also contribute as part of a Health in All Policies approach. In this vein, national parliaments provide a multisectoral platform that can support and sustain political will, representing an additional layer of support in advancing multisectoral preparedness coordination. Parliaments are responsible for adopting and monitoring laws, policies and strategies, and hold governments accountable for their effective, efficient and transparent implementation. Through their oversight powers, they can ensure that IHR commitments are translated into action and can approve budgets and allocations that allow core public health security capacities to be sufficiently funded. Parliaments can advocate, facilitate and formalize multisectoral engagement with other sectors to realize productive alliances for health emergency preparedness. Meaningful partnership between the health sector and parliaments is being advanced through the 2018 Memorandum of Understanding between WHO and the Inter-Parliamentary Union (33), and adoption by the Inter-Parliamentary Union in 2019 of a resolution to achieve universal health coverage by 2030 (34).

Private sector. The private sector – particularly with regard to trade, transport and tourism – is heavily impacted by health emergencies. Major financial losses pose a threat to individual corporations, while restricted travel and trade decreases mobility and can disrupt a country's

infrastructure and cause economic instability. Private sector engagement can add value both in health emergency preparedness and during emergencies, when the private sector frequently provides large and rapid mobilization for local response efforts, though collaboration often ceases soon after the end of the crisis. Continuous engagement with corporate stakeholders provides a better understanding of the private sector's experiences and needs during public health emergencies. This can help identify incentives for the private sector to collectively engage in strengthening health emergency preparedness. Recent evidence (28) illustrates the benefits for businesses in including risk assessments for disease threats into their planning processes. The private sector can invest in multisectoral preparedness coordination alongside efforts to ensure business continuation (35). In practice, businesses could decide to include health among the best practices in the industry impact assessment tools, continuity plans, and safeguarding mechanisms, or they may add emergency preparedness to the occupational health and sentinel surveillance systems of company health clinics. Intensive engagement of the private sector in health emergency preparedness will be required in countries that are heavily reliant on complex networks of private health care providers (for example, ambulance systems and hospitals) in order to ensure adequate support and capacity. The private sector's challenges in and (often innovative) contributions to public health emergencies can only be addressed by including the private sector as an integral part of multisectoral preparedness coordination.

Non-State actors. These play an important role in community engagement for health emergency preparedness and response, mainly due to their experience with and access to local, religious, vulnerable or marginalized communities. Countries need to assess the most effective ways to engage non-State actors based on country priorities and the technical and logistical capabilities of those actors. Non-State actors can often make a significant contribution to the multisectoral preparedness coordination in the areas of outreach, specialized technical expertise, local human resources, and communal data, services and technologies. Examples include academic research or collaboration between civil society stakeholders and public health institutions providing epidemiological data on

disease threats (36), mobile technologies to assist disease surveillance, civil society support for community engagement, and advocacy and risk communication across large areas and

subpopulations. This relevant information, all of which can complement governmental resources, can be integrated to enrich health emergency preparedness and advance health security.

Box 2 gives an example from the United States of America of multisectoral preparedness coordination.

United States Global Health Security Strategy: a national and global approach to prevent, detect and respond to infectious disease threats

Together with the National Security Strategy, the National Biodefense Strategy, and the United States executive order on the Global Health Security Agenda, the United States Global Health Security Strategy is designed to guide the United States Government in protecting the United States of America and its partners abroad from infectious disease threats. The strategy pursues three interrelated goals:

- strengthen partner country global health security capacities
- increase international support for global health security
- establish a homeland prepared for and resilient against global health security threats.

Strengthening partner country global health security capacities involves collaboration with partners, including countries, multilateral organizations, and nongovernmental stakeholders, through the Global Health Security Agenda to strengthen and sustain capacity to prevent, detect and respond to infectious disease threats. This includes working with partners to make progress towards achieving IHR core public health capacities while supporting implementation and compliance with other international frameworks. Activities will be multisectoral, leveraging the strengths of numerous United States departments and agencies. Support for capacity-building in selected countries is intended to be temporary, followed by a transparent and systematic transition to sustainable health security capacities in the partner country. The United States Government's support is targeted based on global health security risks, policy priorities, and national security, and activities will be milestone driven and time limited.

Increasing international support for global health security involves coordinating with partner governments, multilateral organizations and the nongovernmental sector to promote sustainable donor and domestic financing to build health security capacity beyond the lifespan of the United States Government's investments. The United States will use bilateral, regional and multilateral engagements to encourage countries to make health security a national priority, and to invest in their own domestic capacities. The United States will support the inclusion of all relevant sectors to strengthen health security, including human, animal, and environmental health sectors, as well as diplomatic, defence, security, finance and research disciplines.

Establishing a homeland prepared for and resilient against global health security threats includes accelerated research on medical countermeasures, planning for clinical trials during emergency response, and communicating better with affected populations on public health measures, including vector control and research goals. This also includes enhancing and sustaining critical health security capacities for epidemiology, surveillance, medical entomology and laboratory diagnostics, among other technical areas.

The Global Health Security Strategy emphasizes the value of taking a multisectoral approach to drive health security outcomes, and defines areas of coordination, roles and responsibilities. It outlines opportunities for interagency coordination, including domestically, through a GHSA Interagency Review Council, and overseas, utilizing multisectoral embassy teams for partner country capacity-building. Key roles for departments and agencies are defined in the strategy, with an overall emphasis on multisectoral coordination to achieve the three interrelated goals.

3 Key elements of multisectoral preparedness coordination

In each of the following subsections, key elements of multisectoral preparedness coordination are described, which countries may consider when taking action within the context of the multisectoral preparedness coordination framework.

3.1 High level political commitment

3.1.1. Country ownership

Seeking high-level political commitment and support. This is necessary to provide the mandate for the multisectoral preparedness coordination of stakeholders beyond the traditional health sector. Political assertion is crucial, as it enables the required whole-of-government and whole-of-society approach to coordination. This includes seeking the engagement of the prime minister's offices, high governmental and ministerial councils, and offices in charge of overarching planning or policy related to matters of national concern in order to bring together public, private and non-State stakeholders.

Embedding health emergency preparedness into overarching frameworks. Regional and global initiatives and frameworks (such as the Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies (APSED III), the African Public Health Emergency Fund, and the Europe 2020 Strategy) may help to strengthen national health security objectives by working towards a common goal at the political level. This alignment incentivizes multisectoral participation and coordination at the strategic and operational levels.

Engaging the national parliament. This is necessary to ensure the endorsement of relevant legislation and other measures (laws, regulations, directives, acts and decrees, policies and strategies) that support multisectoral coordination for emergency preparedness and health security. Parliaments can support enactment of health security measures and hold governments accountable for health emergency preparedness and IHR implementation. They are effective and influential multisectoral platforms for promoting country ownership for enhanced country health emergency preparedness (see also section 2.4).

3.1.2 Champions and leadership

Identifying champions in relevant sectors.

High-level political commitment is reinforced by champions promoting multisectoral preparedness coordination with conviction and personal engagement within their own sector, but also with the ability to reach stakeholders beyond. Champions are crucial to initiate multisectoral collaboration and advocate coordination across multiple sectors based on both evidence-based information and qualitative data. Champions may be identified in the sectors already involved (particularly the health sector), as well as in sectors that have a good track record of cross-sectoral and multisectoral coordination or have good relations and networks with other relevant stakeholders.

Selecting leaders for the coordination process.

This requires clarity on the purpose and scope of the task, and identification of the stakeholders involved in the multisectoral preparedness coordination. Leadership may be placed in a single ministry or institution, may be shared, or can rotate among stakeholders on an agreed schedule. Delegating leadership to an overarching governmental body (for example, prime minister's office, ministerial council, high-level planning body) rather than a line ministry (such as the Ministry of Health) may result in broader acceptance, wider outreach and a more cooperative approach. Effective leadership requires political support and selection of a lead with appropriate status, management skills and ability to bring various public and private sectors and stakeholders to the table. The lead is tasked with institutionalizing the multisectoral preparedness coordination by involving all relevant public and private stakeholders from the start of the process, setting targets for coordination and chairing the steering committee. Leading the multisectoral preparedness coordination requires the adoption of a comprehensive understanding and vision of health emergency preparedness and health security within a whole-of-government approach.

Both champions for and leadership of multisectoral coordination are key for the success of the coordination. They will enhance mutual trust, a sense of ownership, stakeholder buy in and accountability during the process (see subsection 3.3.1).

3.2 Formalizing multisectoral preparedness coordination

3.2.1 Developing multisectoral coordination structures

Assessing existing multisectoral coordination structures. Countries tend to consider multisectoral coordination when responding to a public health event, for example as part of disaster risk management, which often subsides when the emergency has ceased. Multisectoral preparedness coordination needs to aim at ensuring functional and sustainable mechanisms. Any pertinent and existing coordination structure should be assessed for suitability as a potential mechanism for multisectoral coordination for health emergency preparedness and health security. This initial assessment will help to avoid unnecessary duplication of coordination mechanisms, to identify valuable lessons learned in the specific country context, and to determine the best fit for the integration of relevant sectors and stakeholders.

Constituting a steering committee. High-level coordination can be exerted through a steering committee combining political representation and technical expertise to address strategic, technical and managerial aspects of the coordination. The committee facilitates the building of a collaborative, cooperative and supportive environment for sharing knowledge, information and experience among participating sectors and stakeholders, between the national and subnational levels, and with regional and global actors and networks. Its tasks include assessing and providing relevant information

and data, and commissioning research to provide strategic guidance on multisectoral preparedness coordination. The committee has the authority to take strategic decisions, develop terms of reference for roles and responsibilities, and set targets and indicators in relation to the multisectoral preparedness coordination. The committee can mandate advisory groups, technical working groups, and task forces to provide guidance, conduct research and implement activities on specific strategic or technical areas. The steering committee should meet regularly and will be accountable to the lead overarching governmental body (see subsection 3.1.2), supported by a secretariat. Availability of committed and dedicated funds will increase the operational effectiveness of the committee (see subsection 3.3.3).

Initiating technical working groups. The multisectoral technical working groups are the platforms for a range of technical activities and outputs conceptualized and mandated by the steering committee, including conducting research, developing action plans and standard operating procedures, and organizing and implementing such activities as simulation exercises and after action reviews. The working group is convened on a regular basis for systematic exchange of information related to public health risks and threats in the country. The focus of technical working groups can include strengthening IHR core capacities and related technical areas, addressing stakeholder-specific needs and contributions to emergency preparedness, and linking and integrating the subnational, regional and global levels in country activities for health security, as advised by the steering committee.

Box 3 presents an example from Indonesia of multisectoral preparedness coordination.

Indonesia: high-level commitment to multisectoral preparedness coordination

In June 2019, the President of the Republic of Indonesia signed a presidential instruction aimed at increasing the country's capacities to prevent, detect and respond to infectious diseases, pandemics, bioterrorism and other chemical, biological, radiological or nuclear risks and threats. The measure aimed to improve national resilience and provide a framework for how institutions and ministries should collaborate and coordinate across sectoral lines, including at the subnational level, to counteract those risks and threats.

The presidential instruction provides specific instructions to 24 ministers, agency heads, mayors and the leaders of the armed forces and national police. All are directed to undertake an evaluation and review of the current health security situation and establish relevant policies, laws and regulations, while acting in a coordinated and integrated manner.

The presidential instruction decrees that coordination for outbreaks, epidemics, pandemics and other public health emergencies related to security falls under the Coordinating Minister for Politics, Law and Security. The Coordinating Minister for Human Development and Culture is responsible for the preparedness and response coordination that does not have a security element. Both ministers are tasked with:

- increasing the capacity of ministries and institutions under their coordination to prevent, detect and respond to threats;
- establishing guidelines for increasing synergy, cooperation and collaboration in planning, drafting, implementing and evaluating relevant policies;
- developing an international cooperation framework in coordination with the Ministry of Foreign Affairs to improve the capability to prevent, detect and respond to the threat of global public health emergencies.

Both the Coordinating Minister for Politics, Law and Security and the Coordinating Minister for Human Development and Culture report to the Cabinet Secretary, who monitors and evaluates the implementation of the presidential instruction and reports the results to the President.

The presidential instruction provides directions carefully tailored to each of the 24 relevant ministries and agencies. For example, the Minister of Foreign Affairs is tasked to improve coordination of cross-border cooperation, while the Minister of Finance is instructed to provide support for health security budget allocations, strengthen supervision of the traffic of goods through Indonesian customs, and review and improve legislation related to the traffic of goods.

The presidential instruction offers an example of high-level commitment to multisectoral preparedness coordination that can serve as a model for other countries in the South-East Asia Region and globally to adapt to their own specific contexts and needs in strengthening health security.

3.2.2 Stakeholder mapping and analysis

Mapping stakeholders. This task, which can be undertaken using a transparent, methodical process based on defined criteria, is the basis for selection of relevant public and private sector entities and stakeholders for multisectoral preparedness coordination. Inquiries might be sent through government channels to identify stakeholders involved in specific technical areas or topics related to health emergency preparedness and health security (20). The complexity of the process depends on the scope, objectives, priorities and tasks to be addressed by the multisectoral preparedness coordination. The process can be iterative or continuous, in which case stakeholders can be added or excluded at a later stage, as deemed necessary. This helps to keep the mechanism as inclusive but at the same time as lean as possible. Limiting participation according to the most relevant sectors and stakeholders will enhance coordination functionality (see section

2.4); if necessary, subgroups relating to specific sectors or topics can be created (see subsection 3.2.1). It is advisable to include sectors and stakeholders that have experience in collaboration across different sectors and can demonstrate an ability to coordinate others and act as subgroup coordination leads.

Analysing the needs and contributions of multisectoral stakeholders. For some targeted sectors and stakeholders, their roles in contributing to health emergency preparedness and health security may not be obvious at the beginning. Stakeholder mapping and analysis can not only assist in systematically determining all relevant public and private stakeholders and non-State actors, but it can also identify needs, areas in which each actor can add the most value, (potential) types of contributions, and incentives for engagement across the various sectors and stakeholders for multisectoral preparedness coordination.

3.2.3 Joint needs assessment

Jointly collecting data on health risks and threats.

Once all relevant stakeholders for the multisectoral preparedness coordination have been selected, a joint needs assessment will identify gaps and needs around emergency preparedness and health security. Data on health risks and threats and general health indicators are vital to inform decision-making for the multisectoral coordination for health emergency preparedness and health security (37, 38). Health information system routine data, internal or external assessments (such as joint external evaluation and after action reviews), and prevalence and risk mapping are common data sources. Reviewing past public health events or using simulation exercises helps to identify additional gaps and potential need for collective support.

Sharing of multisectoral information. This allows adequate risk and vulnerability mapping. Joint assessment across sectors enables exchange of data and perspectives, including on vulnerable populations. Sectors and stakeholders engaged in the multisectoral preparedness coordination may have conducted or have access to sector-specific analyses related to health security. In addition, public health institutes, academia and other non-State actors often collect specialized data, and might be able to assist in expanding research on priority areas (see section 2.4). A lack of data may require funding requests for research so that better data can be generated to improve decision-making (see subsection 3.3.3). Collaborative publication based on the work implemented through the multisectoral preparedness coordination can sustain cross-sectoral partnership beyond the actual coordination process (see subsection 3.3.2).

Verifying parameters through the assessment.

The joint assessment not only indicates gaps and needs in the country's health emergency capacity, it also provides an opportunity to (re) define objectives and expected outcomes in order to harmonize expectations among all stakeholders. Keeping track of the engagement and approaches of the various sectors and stakeholders is vital in organizing concerted efforts (see subsection 3.3.4). There is a need for sufficient flexibility in multisectoral preparedness coordination to allow modification of workflow and measures for enhanced results and progress.

3.2.4 Formalizing the multisectoral preparedness coordination

Benefits of formalization. Depending on country context and purpose, different types and levels of formalization can be considered to support multisectoral coordination for health emergency preparedness and health security. The options include memoranda of understanding or various legislative measures, such as regulations, directives, decrees, and acts or laws (depending on country context). Even though defining a legal status or formal structure is often time consuming, formalization unites participation of different sectors and stakeholders, defines roles and responsibilities, facilitates coordination needed at different levels and enhances sustainability.

Formalization at the highest administrative level possible.

High-level political support, including parliament, provides the leadership with a strong official mandate and ensures acceptance across diverse sectors (see section 3.1). Formalization needs to address both strategic and operational issues, and to consider options at the subnational, regional and global levels. Legislative changes might provide the strongest mandate for multisectoral preparedness coordination but are likely to require lengthy processes. The continuous engagement of national parliament in this process is advisable (see section 2.4). Depending on the country and legal context, memoranda of understanding can help to define sectoral roles within the multisectoral coordination for health emergency preparedness and health security. These are easier to arrange and more adaptable than more formal measures, though they provide less authority outside the organizations involved. Memoranda of understanding and other forms of organizational commitment can be reinforced through circulars and other legal documents that can support effective implementation at all levels. In some countries and situations, informal groups or task forces represent the most feasible option, though they lack clear reporting and command structures, and their decisions might not be broadly accepted.

Formalized accountability frameworks for the steering committee and technical working groups.

Such frameworks can lead to enhanced quality of the multisectoral preparedness coordination and to strengthened governance mechanisms (see subsection 3.3.4). Accountability

frameworks have an impact on the processes for decision-making and consensus-building, data sharing, documentation and information management, and agreed approaches for feedback mechanisms, conflict resolution and mediation (see subsections 3.3.1 and 3.3.2).

3.3 Implementing multisectoral preparedness coordination

3.3.1 Transparency, trust and accountability

Building transparency and accountability at the onset. This contributes to an environment of mutual trust and respect, which is essential for effective coordination across multiple sectors. A formalized coordination process further enhances transparency and accountability (see subsection 3.2.4). While multisectoral preparedness coordination is facilitated by a culture of open communication and defined roles and responsibilities for each sector, clearly designating and communicating shared responsibilities is equally important. Successfully establishing trust among the stakeholders of the multisectoral preparedness coordination will result in more effective planning for and responding to public health emergencies.

Establishing an understanding of the common goals and expectations. Frequently, challenges may arise from the reluctance of different sectors to share data, information and resources due to concerns about interference or loss of sovereignty. Conflicts of interest need to be openly discussed at the beginning of the multisectoral preparedness coordination so that potential misunderstandings can be avoided and resolved, and the most equitable approach followed. The involvement of diverse sectors and stakeholders, including the private sector and non-State actors, may give rise to concerns related to conflict of interest. It is important to understand that it is both a challenge and an advantage to engage multisectoral stakeholders. Diverse perspectives and ways of working can provide complementary contributions to health emergency preparedness and health security (see section 2.4). The needs, incentives and contributions of multisectoral stakeholders are likely to differ. These can be unified by strong leadership representing a whole-of-government approach to the common goal of enhancing country health emergency preparedness.

3.3.2 Communication

Effective communication. This is a prerequisite for successful multisectoral coordination for health emergency preparedness and health security. Regular reporting to government offices and parliament enhances trust and motivates further engagement (39). Communication needs to emphasize the importance of multisectoral engagement for health emergency preparedness to increase buy-in from all relevant stakeholders, including the public. Adequate communication involves establishing regular exchange of information as well as ad hoc updates regarding the objectives and activities of the multisectoral preparedness coordination.

Internal communication. This addresses communication between members of the multisectoral preparedness coordination, including the different decision-making or operational levels that need to be informed. The frequency of the exchange depends on the scope of the coordination. Face-to-face meetings at the beginning of coordination are crucial to bring together the various sectors and stakeholders, which might not have worked together before. Stakeholders should also monitor the effectiveness of the coordination mechanism itself, as well as data protection and ethical issues that arise (see section 3.3.4). A cross-sectoral electronic platform for shared documents allows for ease in providing and sharing information, thus contributing to effective implementation.

External communication. This engages stakeholders outside the coordination process, for example the media and the public, through communication materials, published reports, press communiqués, conferences, social media or other means. Technical and communication experts from the different sectors should develop a joint communication strategy. Risk communication and communication materials for community engagement should emphasize the multisectoral stakeholders involved in emergency preparedness activities. The designation of an official spokesperson may be useful to ensure consistent messaging. Collaborative publication based on the work implemented through the multisectoral preparedness coordination can sustain cross-sectoral partnership beyond the actual coordination process.

Box 4 presents an example of multisectoral preparedness coordination from Finland.

Finland: Security Strategy for Society

The Security Strategy for Society is a government resolution that harmonizes Finnish national principles regarding preparedness, including emergency preparedness, and guides the actions taken by the administrative branches.

The cooperation model for comprehensive security provides the basis for preparedness and taking necessary actions in the event of various disruptions. In the model, all actors share and analyse security information, prepare joint plans, and train and work together. The cooperation model covers all relevant actors, from citizens to the authorities, within a whole-of-society approach.

Cooperation is based on statutory tasks, cooperation agreements and the Security Strategy for Society. The practical implementation of comprehensive security takes place on the basis of both cross-administrative strategies and strategies for individual administrative branches. These include the Internal Security Strategy and the Finnish Cyber Security Strategy, and their relevant implementation programmes.

The Security Strategy for Society was drawn up through broad-based cooperation involving government, the private sector, nongovernmental organizations, communities and citizens. Each administrative branch is responsible for implementing the strategy within its competence. The Security Committee monitors the strategy's implementation and coordinates cooperation measures, together with the ministries' heads of preparedness.

The heads of preparedness coordinate the measures between the ministries in all security situations. The meetings of the heads of preparedness are chaired by the Head of Preparedness of the Government. Each ministry has a head of preparedness, a preparedness committee and a preparedness secretary.

The Security Strategy for Society provides the preparedness guidelines for the administrative branches in vital functions for society: leadership, international and European Union activities, defence capabilities, internal security, the economy, infrastructure and security of supply, functional capacity of the population, service provision, and psychological resilience.

For example, the Ministry of Social Affairs and Health has responsibilities that include ensuring access to social welfare and health care services during incidents and emergencies. The Prime Minister's Office, Ministry of Foreign Affairs, Ministry of Finance, Ministry of Defence, Ministry of the Interior, Ministry of Education and Culture, Ministry of Economic Affairs and Employment, Ministry of Agriculture and Forestry, Ministry of Transport and Communications, and Ministry of Justice each also have their own roles and responsibilities under the Security Strategy for Society, including areas for coordination with other ministries.

3.3.3 Health security preparedness funding

Allocating domestic funding for health security preparedness. This will help ensure the sustainability of the process. Recent work on national emergency preparedness and health security financing conducted by the World Bank (40) and collaborating partners showed that only a small amount of additional (per capita) expenditure is needed every year for countries to maintain or improve their capacities to detect, prevent and

respond to health security challenges. Multisectoral preparedness coordination can support increased efforts to cost, budget and track expenditure for health security preparedness. This includes identifying health emergency preparedness gaps through technical evaluations, development and linking of costed action plans (including national action plans for health security), mapping of resources, for example using the WHO REMAP tool (41), and prioritization exercises to ensure financing priorities are included in national expenditure frameworks, budgets and sectoral plans.

Engaging the ministry of finance. The ministry of finance is instrumental in planning for health emergency preparedness and health security. Its engagement will allow a common understanding of priorities and associated financial requirements and needs for appropriate emergency preparedness in the specific country context. Dedicated funding for multisectoral coordination is required for an effective process. The active engagement of the ministry of finance in the process will provide greater leverage and advocacy in the area of health emergency preparedness specifically, and strengthen health system-related budgeting in general. A focal point for budgeting and financing should be part of the steering committee to facilitate adequate funding allocation for priority preparedness items (see section 2.4).

Multisectoral preparedness coordination as an investment. Financing the coordination itself does not necessarily require large amounts of resources but does demand effective planning. In most countries, limited human resources is one of the main challenges. Careful planning and budgeting is important, particularly in heavily centralized systems. The financial needs assessment conducted when deciding on the scope of the multisectoral preparedness coordination will identify the funding priorities. The role of public and private stakeholders as well as non-State actors in funding and contributing to the multisectoral preparedness coordination should be to be explored.

3.3.4 Monitoring the multisectoral preparedness coordination

Good governance through measuring progress of the multisectoral preparedness coordination. This not only verifies coordination processes but can also validate if the alignment yields positive results for health emergency preparedness and health security. An effective monitoring and evaluation process should be defined at the onset of the task, tailored

to country context and needs. Tracking implementation and determining the extent to which agreed objectives and goals have been reached ensures the effectiveness of the coordination mechanism. Assessing the multisectoral implementation is only beneficial when reviewed routinely by the steering committee. This enables identification of any necessary amendments to strategic and operational procedures, and related changes in specific capacities or resources. Progress updates as part of regular briefings (see subsection 3.3.2) are key to keeping the involved sectors and stakeholders informed, engaged and accountable.

Role of the IHR Monitoring and Evaluation Framework. The IHR Monitoring and Evaluation Framework can support multisectoral preparedness coordination by providing tools to assess country emergency preparedness capacity. These tools include State Party self-assessment annual reporting, joint external evaluation, after action review (42) and simulation exercises (43). The tools of the IHR Monitoring and Evaluation Framework offer a variety of established methodologies to assess and enhance emergency preparedness capacities. Additional monitoring tools, including indicators, may be developed to reflect stakeholders' roles, responsibilities, needs and contributions to emergency preparedness and health security in the country. Successful outputs and outcomes are related to strengthened coordination between public and private stakeholders and non-State actors for building and maintaining IHR core capacities. Effective multisectoral preparedness coordination will not only improve countries' capacities to prevent, detect and respond to public health risks and threats, but will also enhance collaboration and coordination before, during and after public health emergencies, building upon a tried and tested operational multisectoral preparedness coordination.

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Annex 1: Literature review

Results of the literature review

An analysis was done based on the 24 peer-reviewed articles fitting the inclusion criteria. The review found relevant examples of multisectoral collaboration and coordination from 12 different countries (Australia, Cameroon, Canada, Denmark, India, Italy, the Philippines, the Russian Federation, Sweden, Thailand, Uganda and the United Republic of Tanzania) addressing a variety of topics, for example diseases such as brucellosis and rabies, but also areas such as agriculture, education, disaster risk management, financing and legal preparedness.

The majority of articles called for stronger and enhanced multisectoral coordination, but there were also studies concluding that intersectoral action for health could not be achieved by structural fixes, which often reproduced the organizational issues they were intended to overcome, and created activities that were parallel to and decoupled from daily operations.

To avoid these problems, the following factors for successful multisectoral coordination were mentioned by several authors:

- strong leadership, possibly at a high political level
- mapping of stakeholders
- inclusion of key players and issues
- early joint assessment and definition of the mission and strategy
- formalization of coordination
- use of a coordination committee
- definition of measurable outcomes
- monitoring of the success of the coordination mechanism
- creation of trust and respect
- generation of evidence for decision-making
- establishment of communication channels
- allocation of funding.

Following the literature review, these aspects were discussed with Member States, and those points that were considered as important were addressed in preparing this framework.

The database used was PubMed. This is a free search engine accessing primarily the MEDLINE database of references and abstracts. MEDLINE (Medical Literature Analysis and Retrieval System Online, or MEDLARS Online) is a bibliographic database of life sciences and

biomedical information. It includes bibliographic information for articles from academic journals covering medicine, nursing, pharmacy, dentistry, veterinary medicine and health care.

The review focused on examples or plans of collaboration and coordination and lessons learned. For the first search level, all articles with any version of the words cross-sectoral, inter-sectoral or multi-sectoral and health in the title were included (n = 189). To address the interest in examples from national level, articles where the titles were quoting community, city or local were excluded from the further analysis (n = 23). As the interest lay in health security and the IHR (2005), other specific topics (health care, depression, mental, equity, social determinants, health promotion) that were frequently the focus of the articles were systematically excluded (n = 59). The titles of all remaining articles were scanned by the reviewer for relevance, which led to exclusion of another 51 articles. By scanning the abstract of the remaining 56 articles, 32 not relevant articles could be excluded, leading to 24 peer-reviewed published articles, which are included in the following literature review (Figure A1.1).

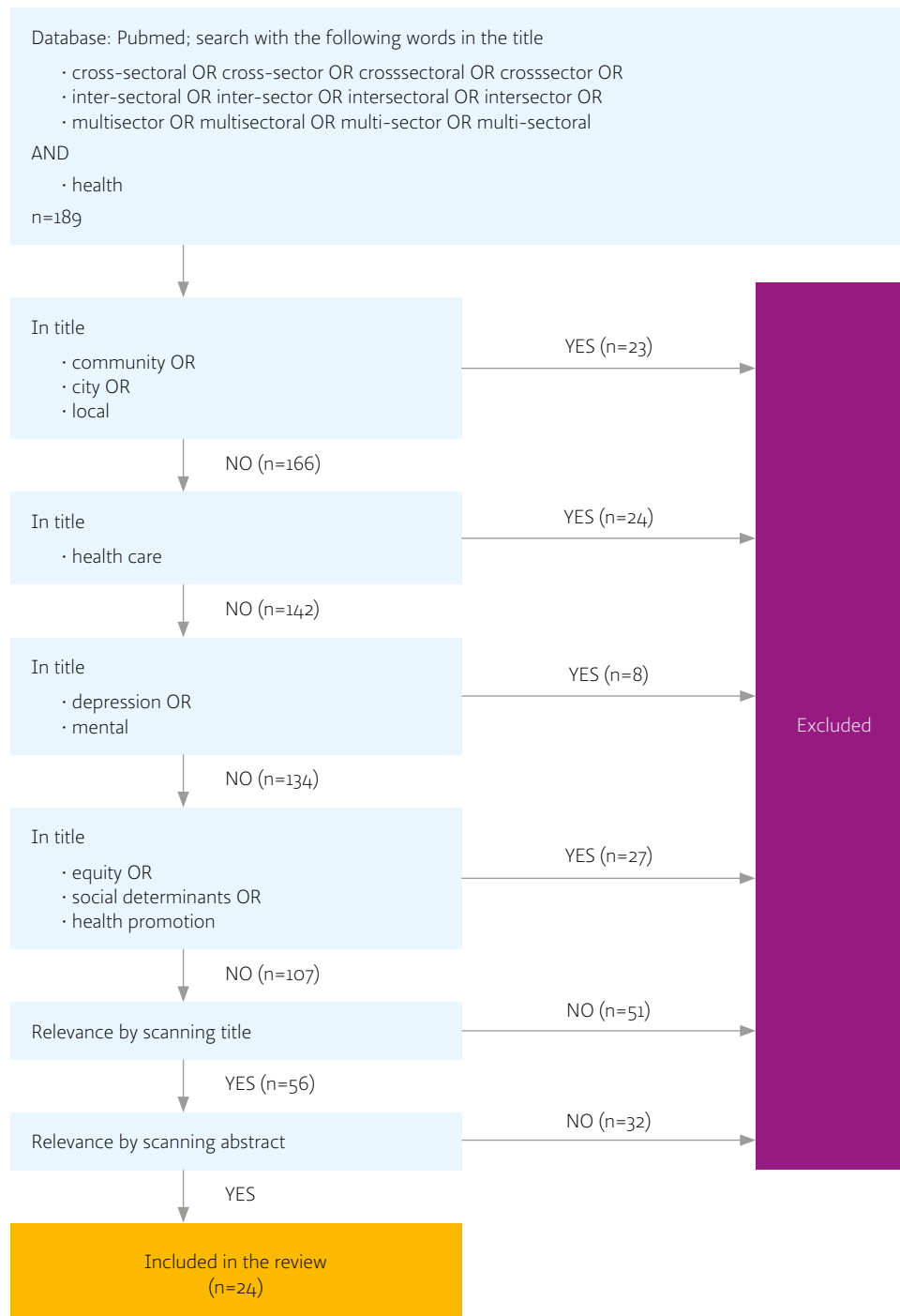
The database used was Pubmed. This is a free search engine accessing primarily the MEDLINE database of references and abstracts. MEDLINE (Medical Literature Analysis and Retrieval System Online, or MEDLARS Online) is a bibliographic database of life sciences and biomedical information. It includes bibliographic information for articles from academic journals covering medicine, nursing, pharmacy, dentistry, veterinary medicine, and health care.

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the abstract of the remaining 56 articles, 32 not relevant articles could be excluded leading to 24 peer reviewed published articles, which are

included in the following literature review. (see graph 1)

Graph 1. Literature inclusion flowchart



Results

Axelsson and Bihari-Axelsson describe the coordination problem as follows: it is already difficult to coordinate different actors within the health sector, but it is even more difficult to coordinate actors from different sectors of society (1). This requires voluntary collaboration between different organizations. According to organization theory, such inter-organizational relations are more loosely coupled than intra-organizational relations, since the different organizations may not be part of a common hierarchy (2).

Magee writes that the social, economic and political challenges that have accompanied the rapidly changing and fundamentally transforming global environment have created unique social challenges that demand cross-sectoral solutions (3). In pursuit of these new partnerships in the health sector, there should be a bias towards action, early organization and prevention. Successful cross-sectoral partnerships in health are fundamentally inclusive and actively involved in bridging government, business, academia and civil society. They favour joint value creation. Careful early assessment for mission and strategy, inclusion of key players and issues, clear measurable goals, and political readiness are critical elements for future success. Use of an independent expert advisory committee in design and monitoring of comprehensive public health strategies is valuable. Magee describes possible obstacles to success as absence of top-level leadership, basic disagreements on the fundamental scientific underpinnings, absence of strong prevention programming, hidden political agendas, exclusion of key sectors, and failure to identify a key issue and address it proactively (3).

A scoping review by Shankardass et al. identified and described scholarly and grey literature referring to global cases of intersectoral action for health equity featuring a central role for governments (4). The review found 128 unique articles describing intersectoral action across 43

countries. A variety of approaches were used to carry out intersectoral action, but articles varied in the richness of information included to describe different aspects of these initiatives. The authors concluded that the description of these complex, multi-actor processes in the published documents was generally superficial and sometimes entirely absent, and improvements in such documentation in future publications was warranted. They suggested that interviews be used to facilitate a more comprehensive understanding from the perspective of the multiple sectors involved (4).

Rasanathan et al. focused in their article on low- and middle-income countries (5). Their results showed that the focus of the health sector in most countries was almost exclusively on health care services, and the potential of multisectoral collaboration remained untapped in many low- and middle-income countries. Different sectors have different contributions to make towards solving specific health problems. In each case, the profile, interests, incentives, and relationships of key individuals and sectors must be mapped and analysed to inform the design of approaches and systems to tackle a shared problem. Collaborative and distributed leadership is key for effective governance of multisectoral action, with a need to build leadership capacity across sectors and levels of government and cultivate champions in different sectors who can agree on common objectives. Important ways forward to support countries to take a multisectoral approach for health include ensuring that the universal health coverage agenda addresses the capacity of the health sector to work with other sectors, learning from multisectoral efforts that do not involve the health sector, improving the capacity of global institutions to support countries in undertaking multisectoral action, and developing a clear implementation research agenda for multisectoral action for health (5).

Countries

Australia

Health in All Policies has been promoted as a means of embedding concern for health impacts in the policy-making process. Lawless et al. report from South Australia, where specific structures and processes to achieve this have been developed and tested among policy officers and managers in all sectors of government (6). The primary mechanism of the South Australian Health in All Policies approach is the health lens analysis – an intersectoral, partnership process drawing on public health research methods. Evaluation findings suggest that the health lens analyses have resulted in the following: increased understanding by policy-makers of the impact of their work on health outcomes; changes in policy direction; development and dissemination of policy-relevant research; greater understanding and stronger partnerships between health and other government departments; and a positive disposition towards employing health lens analyses in future work. There have long been calls for intersectoral action in order to achieve public policy supportive of positive health outcomes. Evaluation to date suggests that the health lens analysis is a promising means of moving the agenda from policy rhetoric to policy action (6).

Cameroon

Cameroon had a shortage of human resources for health, and lacked the economic resources to support the mass recruitment of new health workers. Kingue et al. describe the efforts made to overcome this situation (7). Since 2006, strong leadership has facilitated the process of moving to an evidence-based approach for development of human resources for health in Cameroon. It has encouraged collaboration between the ministries involved in the Cameroonian health sector, fostered relevant discussion and dialogue, increased trust between the various stakeholders, and promoted a consensus view and approach. The nongovernmental organizations and national societies involved in health care in Cameroon have been able to expand their role, increase their visibility and improve their credibility with the national government and other stakeholders. Even health workers in remote areas have been able to contribute to the planning process of human resources for health. The authors conclude that strong leadership is needed to ensure effective coordination and communication and that together the main challenges need to be identified (7).

Canada

The Public Health Agency of Canada's Multi-sectoral Partnerships Initiative, administered by the Centre for Chronic Disease Prevention, brings together diverse partners to design, implement and advance innovative approaches for improving population health. The article of Willis et al. describes the development and initial priorities of an action research project that aims to facilitate continuous improvement of the Centre for Chronic Disease Prevention's partnerships initiative and contribute to the evidence on multisectoral partnerships (8). The initiative, which involves many traditional and non-traditional partners, is trying to achieve social and economic gains by harnessing the expertise, resources and reach of diverse partners. Consultations and the review highlighted the importance of understanding partnership impacts, developing a shared vision, implementing a shared measurement system and creating opportunities for knowledge exchange. The authors conclude that the initiative may prove useful for a range of audiences, including other government departments and external organizations interested in capturing and sharing new knowledge generated from multisectoral partnerships (8).

Denmark

Holt, Carey and Rod analysed the decentralized political system in Denmark, where the 98 municipalities are responsible for welfare services such as primary education, culture and leisure, social services, elder care, employment services and local planning (9). Placing these tasks within the municipal jurisdiction was partly based on ideas about intersectoral action. To comply with these expectations, many Danish municipalities established intersectoral governance structures and ensured a general mandate for health in municipal strategies and policies. Continuous and frequent processes of reorganization were widespread in the municipalities. However, they appeared to have little effect on policy change. The two most common governance structures established to transcend organizational boundaries were the central unit and the intersectoral committee. Both these organizational solutions tend to reproduce the organizational problems they are intended to overcome. Even if structural reorganization may succeed in dissolving some sectoral boundaries, it will inevitably create new ones. Therefore Holt, Carey and Rod concluded that it was time to dismiss the idea that intersectoral action for health could be

achieved by means of a structural fix. Rather than rearranging organizational boundaries, it may be more useful to seek to manage the silos that exist in any organization, for example by promoting awareness of their implications for public health action and by enhancing the boundary-spanning skills of public health officers (9).

In another publication, Holt et al. reported on the intersectoral process of implementing a municipality-wide health policy in one Danish municipality (10). They found that the myth of intersectoralism posed a barrier to the ambition of moving from overall statements of intent to more specific plans for action. The process produced activity, but activity that seemed somewhat parallel to and decoupled from daily operations. Despite elaborate governance mechanisms – which are often recommended as the means to foster intersectoral collaboration – the process did not entail the expected move from rhetoric to action. Particularly, three elements functioned to avoid the necessary specification that would direct action: (a) idealization of universal intersectoralism; (b) doubts about economic outcomes; and (c) tensions between inconsistent demands (10).

Larsen et al. also looked into the implementation of intersectoral action for health in one Danish municipality (11). The results of this case study indicate that several factors may influence the implementation and success of intersectoral health policies. Important elements are the compatibility of interests among relevant sectors, the identification of a common framework and actions based on sound baseline data, political will, citizen participation, media attention, the commitment of all stakeholders, the allocation of sufficient (joint) resources, and the policy's ability to produce benefits. The fact that benefits are often more difficult to calculate than immediate costs can hinder project development; clear common objectives based on baseline information can help overcome this obstacle to some degree. It is seen as very important that the collaboration itself should be addressed in an intersectoral manner – starting from the initial stages of policy development and continuing through the stages of implementation and evaluation – instead of the health sector dominating with its own perspective on health issues (11).

India

Salunke and Lal describe in their article the multisectoral approach in India, which entails

collaboration among various stakeholder groups (for example, government, civil society and the private sector) and sectors (for example, health, environment and the economy) to jointly achieve a policy outcome (12). By engaging multiple sectors, partners can leverage knowledge, expertise, reach and resources, benefiting from their combined and varied strengths as they work towards the shared goal of producing better health outcomes. One of the major advantages is optimization of usage of resources by avoiding duplication of inputs and activities, thus improving programme effectiveness and efficiency. Political will and mandate at the policy level are necessary to plan and execute successful multisectoral coordination. All the major stakeholders need to share a common vision and perspective. Developing institutional mechanisms helps to standardize the processes of intersectoral coordination. Opportunities and mechanisms for routine multisectoral collaboration include sufficient allocation of resources and time; open, inclusive and informed discussion among key stakeholders; a policy process and policies shaped and influenced by multisectoral inputs; monitoring and assessment of collaborative partnerships for learning and improvement; and evidence generated and shared on the cross-sectoral benefits of achieving the stated health goal through a multisectoral response (12).

Italy

Italy has established health teams to control brucellosis, a zoonosis affecting livestock and humans (13). The collaboration of veterinarians, physicians and other health care workers has contributed to a decrease in incidence of the disease in Italy. In the initial phase of the control programme, an interdisciplinary team was formed to discuss the general aims and objectives of the project, jointly training human and animal health personnel on disease surveillance and control. This course became the key point for health workers' involvement and for the establishment of intersectoral collaboration (13).

Philippines

Rabies is an endemic disease in the Philippines (14). To address the disease at source, coordinated efforts are needed involving human health, animal health and local government units. To address the existing gaps and guide intersectoral collaboration, a practical intersectoral linking tool has been developed and implemented. The tool is an operational protocol

linking a network of local key actors involved in rabies detection, reporting and implementation of appropriate interventions. The first results indicate earlier detection and better prevention of further cases (14).

Russian Federation

Axelsson and Bihari-Axelsson analysed the public health system of the Russian Federation and suggested clarifying the differentiation of roles and tasks between the different actors in order to improve their integration. Organization of public health could be improved by establishing a national authority to initiate and support intersectoral collaboration, and establishing special liaison committees involving a range of actors – including nongovernmental organizations – that could contribute to intersectoral decision-making (1).

Sweden

The main findings of a study by Mannheimer, Lehto and Ostlin showed that the Swedish development correlated with the international progress and promotion of intersectoral health policy and health impact assessment; that the process of policy change was more expert based at the national level and politician based at the local level; and that the interest in health impact assessment was more prevalent from the mid-1990s up to the approval of the national policy in 2003 (15). In Sweden, public health is perceived as a universally important subject, but it rarely reaches the highest national policy level. It is thus difficult to involve high-level political actors in policy development and implementation. The results showed that actors perceived the problems differently, depending on their agenda and interest. Politicians and experts had a high impact on the formulation of intersectoral health policy and policy goals. However, there was little focus on implementation plans, implying that political actors were not in agreement, while experts sometimes expressed conflicting evidence-based opinions on how to best implement the policy. The formulated targets, at both national and local levels, were limited with regard to suggestions for action and plans for implementation. The intersectoral health policy did not manage to open the way for involvement of actors in other policy sectors, and there was lack of clarity about responsibilities in relation to the policy (15).

Thailand

Tangcharoensathien et al. reported on the structures that Thailand has enacted under the National Health Act since 2007 (16). The act established a National Health Commission, chaired by the Prime Minister. The commission members comprise one third multisectoral public policy-makers; one third academia and professionals; and one third civil society organizations and private sector entities. They convene an annual national health assembly, as mandated by law. The assembly has adopted several landmark resolutions, in particular those requiring multisectoral action for health. Capacity-building is needed at individual, institutional and system levels to enable multisectoral action for health. For example, the health literacy of individuals and communities requires strengthening. It is also necessary to build individual and institutional capacities to generate evidence on the positive and negative health implications of certain public and private sectoral policies. The evidence should be translated into multisectoral policy decisions through a transparent process of participation and engagement by relevant stakeholders, including government, citizens and the private sector. Progress should be monitored through regular reports, which should be made publicly available. Effective multisectoral action for health requires consensus across all partners to reach a shared vision, which can be perceived as a common ground wherein each institutional vision lies. The shared vision is based on trust and respect; care should be taken to ensure that it is not undermined (16).

Uganda

Zoonotic diseases continue to be a public health burden globally. Uganda is especially vulnerable due to its location, biodiversity and population. Sekamatte et al. report on a One Health zoonotic disease prioritization workshop that identified multisectoral zoonotic diseases of greatest national concern to the Ugandan Government. The workshop was conducted in collaboration with the Global Health Security Agenda (17). Seven zoonotic diseases were identified as priorities for Uganda: anthrax, zoonotic influenza viruses, viral haemorrhagic fevers, brucellosis, African trypanosomiasis, plague, and rabies. One main conclusion of the prioritization was that a One Health approach and multisectoral collaboration are crucial to the development and implementation of surveillance, prevention and control strategies for zoonotic diseases. Uganda

used such an approach to identify zoonoses of national concern. Identifying these priority diseases enables Uganda's National One Health Platform and Zoonotic Disease Coordination Office to address these zoonoses in the future with a targeted allocation of resources (17).

United Republic of Tanzania

Mghamba et al. described in their article the success of the United Republic of Tanzania in health security (18). The country was the first to finalize a costed national action plan for health security following the joint external evaluation, and in doing so met the recommendations of the IHR review committee. The planning process involved all relevant authorities and levels, including those outside the health sector, and identified the need for a high-level coordination platform to map stakeholders and ensure collaboration between multiple sectors. This platform ensures coordination with other existing plans (including disease-specific plans) at all administrative levels of the country. The goal of this mechanism is to limit duplication in resource mapping and planning

and maximize synergies with the National Health Sector Strategic Development Plan. Moreover, a national coordination mechanism allows the United Republic of Tanzania to proactively position available scarce resources from specific programmes into sectorwide development of health systems capable of addressing all hazards, and to streamline monitoring and accountability without jeopardizing the ongoing objectives of disease-specific programmes. Key guiding principles that were critical to the development of the national action plan for health security were country ownership of the entire process; high-level government commitment; use of the One Health approach; and linking the plan to national planning and budget cycles. The multisectoral or One Health approach ensured that the national action plan for health security is an integral part of health system strengthening. Additionally, the national action plan for health security was launched at a parliamentary session in September 2017, ensuring that parliamentarians are fully aware of the plan and can advocate increased domestic funding, including from the private sector (18).

Topics

Brucellosis

Brucellosis is a major cause of loss in livestock production, but also represents a serious hazard for public health as a zoonotic disease. Bögel, Griffiths and Mantovani report that in Italy the implementation of control programmes was supported by intersectoral collaboration involving all concerned services, notably public health and veterinary services, directly committed to brucellosis control. In a health team approach, physicians, veterinarians and other health workers coordinated their work from the planning stage through implementation to evaluation of all phases, contributing to a decrease in incidence of the disease in humans and animals (13).

Rabies

The new operational protocol and practical network of local key players from different sectors involved in rabies detection, reporting and implementation of appropriate interventions in the Philippines was recently established. It is initiated by recognized triggers, such as detection of confirmed or probable rabies cases, and is closely linked with early detection in animals, case investigation, quarantine, diagnosis, reporting and post-exposure prophylaxis. This tool has documented success in initiating timely actions to laboratory-confirmed rabies cases being investigated, which has saved many human lives (14).

Agriculture

Hawkes and Ruel have described a framework that should improve the linkage between the agriculture and health sectors (19). The framework is intended to encourage researchers working at the intersection of agriculture and health to come together to form a larger and stronger community to increase the evidence base from which lessons can be learned to solve linked problems. To achieve this, the authors call for better compilation and communication of evidence of successes and failures, and advocate capacity-building and improved policy-making and governance structures to facilitate linked approaches, starting by setting up forums to bring the stakeholders together. Agricultural and health researchers should identify and prioritize research gaps and needs and develop a joint research agenda. All stakeholders should invest in capacity-building to develop comprehensive action on the ground (19).

Education

Burgess et al. explored the relationship between the health and education sectors in Australia (20). They recommended the collaborative development of memoranda of understanding between the different sectors, setting minimum requirements and standards, and clearly defining roles and responsibilities to allow both sectors to work more effectively together. Establishment of clear communication channels between sectors is also needed. It is important to recognize that the organizational cultures of the health and education sectors differ markedly, and the core values of both sectors needed to be considered (20).

Disaster risk management

In November 2012, the Regional Committee for Africa adopted a comprehensive 10-year regional strategy for health disaster risk management (DRM). This was intended to operationalize the World Health Organization's core commitments to health DRM. The study of Olu et al. reported on the formative evaluation of the strategy, including the progress achieved to date (21). In total, 58% of the countries assessed had established DRM coordination units within their ministry of health. Most had dedicated ministry of health DRM staff (88%) and national-level DRM committees (71%). Only 14 (58%) of the countries had health DRM subcommittees using a multisectoral disaster risk reduction platform. Less than 40% had conducted surveys such as disaster risk analysis, hospital safety index, and mapping of health resources availability. Key challenges in implementing the strategy were inadequate political will and commitment resulting in poor funding for health DRM, weak health systems, and a dearth of scientific evidence on mainstreaming DRM and disaster risk reduction in longer-term health system development programmes. Implementation of the strategy was behind anticipated targets despite some positive outcomes, such as an increase in the number of countries with health DRM incorporated in their national health legislation, ministry of health DRM units, and functional health subcommittees within national DRM committees. Health system-based, multisectoral, and people-centred approaches are proposed to accelerate implementation of the strategy in the post-Hyogo Framework of Action era (21).

Financing

McDaid and Park analysed financing mechanisms to encourage intersectoral collaboration (22). They conclude that there is limited explicit discussion of this topic in the literature. Three principal approaches to financing for intersectoral collaboration are described: discretionary but earmarked funding, which usually remains under the control of a ministry in charge of health; recurring delegated financing allocated to an independent body; and joint budgeting between two or more sectors. Positive examples of all three financing mechanisms can be identified. Their effectiveness in supporting intersectoral collaboration depends on factors such as organizational structures, management, culture and trust. Imbalance in the financial and resource contributions from different sectors can hinder implementation of an intersectoral activity. A sense of ownership for each sector is important for the successful collaborations identified. To support policy-makers in strengthening or introducing specific policies to support intersectoral collaboration between health and other sectors, the following financing mechanisms were suggested by the authors: earmarked funding, delegated financing and joint budgeting schemes; legislation and regulations that allow budget sharing between agencies and ensure accountability; identifying outcomes of interest to all potential intersectoral partners within a partnership; routine effective monitoring and evaluation; voluntary joint budgeting with appropriate regulatory safeguards; and fiscal incentives and access to technical advice and support (22).

Human resources for health

Cameroon had a severe shortage of human resources for health, and those that were available were concentrated in urban areas. As a result of the national emergency plan for 2006–2008,

innovative strategies and a multisectoral partnership – led by the Ministry of Public Health and supported by diverse national and international organizations – were developed to address the shortages and maldistribution of human resources for health in Cameroon. As a result, between 2007 and 2009, the number of active health workers in Cameroon increased by 36%. In the improvement of human resources for health, strong leadership is needed to ensure effective coordination and communication between the many different stakeholders. A national process of coordination and facilitation can produce a consensus-based view of the main human resources for health challenges. Once these challenges have been identified, the stakeholders can plan appropriate interventions that are coordinated, evidence based and coherent (7).

Legal preparedness

Bullard et al. focus in their paper on legal preparedness in the United States (23). They suggest identification and engagement of all relevant traditional and newer partner sectors – including, for example, law enforcement and correction, the judiciary, the military, business leaders, school officials and parent–teacher organizations, emergency management, non-profit organizations, and faith-based organizations. They also emphasize the need to educate each sector regarding its roles and underlying legal authorities and potential liabilities during a coordinated response to a public health emergency. They underline the importance of after action review and table-top exercises, which must include review of legal issues mediating effective response. They also call for appropriate coordination mechanisms (preparedness plans, memoranda of understanding, mutual aid agreements), which should be developed and tailored to sectors, partners, and anticipated cross-sectoral involvement in emergency response (23).

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Annex 2. Expert roundtable: development of a guide for multisectoral preparedness coordination for IHR (2005)

To inform this guide, WHO regional offices and WHO country offices selected countries to provide examples of functioning multisectoral coordination mechanisms for IHR (2005) or health security in their country, which were presented and discussed during a designated expert roundtable in Paris, 4–5 October 2018. Bangladesh, Canada, Finland, France, Germany, Ghana, Indonesia, Jordan, Nigeria, Romania, Thailand, Tunisia, the United Kingdom of Great Britain and Northern Ireland, the United Republic of Tanzania, the United States of America, Viet Nam and Zambia shared their experiences. The findings can be summarized as follows.

The coordination mechanisms in place in these countries mainly addressed IHR implementation, diseases preparedness, emergency services and outbreak responses, as well as the collaboration between health and armed forces or security agencies.

Several countries reported similar challenges. For example, sectoral silos were emphasized as posing a problem for the establishment of multisectoral coordination mechanisms. Different sectors had different perspectives, responsibilities and priorities. The scarcity of resources and competing interests were also often identified as obstacles. It was found that the existing data in the different sectors were sometimes not comparable, making a common understanding difficult. The time and work effort

that coordination required was also seen as a difficulty for its establishment.

Important factors for succeeding with the establishment of multisectoral coordination were the adoption of a regulatory framework for coordination with clear chains of command and the development of standard operating procedures and memoranda of understanding. Joint situation assessments were an important starting point for coordination. Joint trainings and regular meetings were identified as positive initiatives to build a common understanding between sectors. The decision-making processes should be transparent and traceable. It was important to avoid unnecessary new structures and duplications and to plan a regular budget line for the coordination mechanism.

For the monitoring and sustainability of the coordination mechanism, joint simulation exercises, joint trainings and after action reviews were recommended. It was also suggested that the intersectoral network be maintained beyond the specific tasks for the purpose at hand. It could be used to jointly mobilize resources and ensure high-level political commitment.

The provided examples clearly identified a benefit in the establishment of multisectoral coordination. It led in many cases to more effective coordination, enhanced awareness of the topics, and improved preparedness. The mechanism resulted in more inclusive communication and increased public trust in the system. Overall it also helped to reduce costs, if IHR capacity-building was embedded in the system and not separated. In general, the coordination mechanisms helped to establish multisectoral engagement as a standard.

Annex 3. Tripartite zoonoses guide and health emergency and disaster risk management framework

Tripartite Zoonoses Guide: a multisectoral, One Health approach

The tripartite collaboration between the World Health Organization (WHO), the Food and Agriculture Organization of the United Nations (FAO) and the World Organisation for Animal Health (OIE) reflects a long-standing and successful partnership in taking a One Health approach to address the challenges to public health, animal health (both domestic and wildlife) and the environment facing the world today. Prior to the 2019 Tripartite Zoonoses Guide,¹ only one jointly developed, zoonotic disease-specific guidance document existed: the 2008 tripartite *Zoonotic diseases: a guide to establishing collaboration between animal and human health sectors at the country level*.

A decade later, the tripartite collaboration resulted in the creation of the 2019 Tripartite Zoonoses Guide, an update and expansion of the 2008 guide. The Tripartite Zoonoses Guide covers prevention, preparedness, detection and response to zoonotic threats at the human–animal–environment interface in all countries and regions, and includes examples of best practices and options based on the experiences of countries. Although focused on zoonotic diseases, the 2019 guide is flexible enough to cover other health threats at the human–animal–environment interface (for example, antimicrobial resistance and food safety).

The Tripartite Zoonoses Guide provides countries with guidance, best practices and tools for the implementation of a multisectoral, One Health approach to address zoonotic diseases and other shared health threats at the human–animal–environment interface. The guide is for staff managing governmental responses to zoonotic disease threats. In most cases, this includes, at a minimum, the ministries responsible for human health, animal health, wildlife, and the environment. Nongovernmental sectors and disciplines not represented in those ministries often need to be included, such as partners or advisers.

Why a multisectoral, One Health approach?

Multisectoral means that more than one sector is working together (for example, on a joint programme or response to an event), but does not imply that all relevant sectors are working together.

One Health approach involves multisectoral collaboration but ensures that all relevant sectors, including a minimum of the human health, animal health, and environmental health sectors, are engaged.

Benefits of a multisectoral, One Health approach

- All sectors understand their specific roles and responsibilities and can collaborate effectively for prevention, detection, and response to zoonotic disease events and emergencies.
- All sectors have the information they need.
- Decisions are based on accurate and shared assessments of the situation.
- Accountability to each other and to decision-makers ensures action by all sectors.
- Regulations, policies and guidelines are realistic, acceptable and implementable by all sectors.
- Technical, human and financial resources are effectively used and equitably shared.
- Gaps in infrastructure, capacity and information are identified and filled.
- Advocacy for funds, policies and programmes is more effective.

Primary content areas of Tripartite Zoonoses Guide

The Tripartite Zoonoses Guide has three primary content areas to support a One Health approach in countries:

- tools for understanding national context and priorities for One Health, including infrastructure mapping, stakeholder identification, prioritizing zoonotic diseases and country experiences;
- technical chapters for coordinated One Health approaches that cover strengthening government platforms for One Health, emergency preparedness, coordinated surveillance, investigation and response, joint risk assessment, risk communication and workforce development;
- operational tools for the guide, including a workbook for strengthening government platforms, a surveillance and information-sharing capacity-building guide, and a joint risk assessment operational tool.

¹ Taking a multisectoral, One Health approach: a tripartite guide to addressing zoonotic diseases in countries <https://extranet.who.int/sph/docs/file/3524>

Health Emergency and Disaster Risk Management Framework

The WHO Health Emergency and Disaster Risk Management Framework provides a common language and a comprehensive approach that can be adapted and applied by all actors in health and other sectors who are working to reduce health risks and consequences of emergencies and disasters. The framework also focuses on improving health outcomes and well-being for communities at risk in different contexts, including in fragile, low- and high-resource settings. Health emergency and disaster risk management emphasizes assessing, communicating and reducing risks across the continuum of prevention, preparedness, readiness, response and recovery, and building the resilience of communities, countries and health systems.

Drawing on the expertise and field experience of many experts who contributed to its development, the Health Emergency and Disaster Risk Management Framework is derived from the disciplines of risk management, emergency management, epidemic preparedness and response, and health systems strengthening. It is founded on the following set of core principles and approaches that guide policy and practice: a risk-based approach; comprehensive emergency management (across prevention, preparedness, readiness, response and recovery); an all-hazard approach; an inclusive, people- and

community-centred approach; multisectoral and multidisciplinary collaboration; a whole-of-health-system approach; and ethical considerations.

The Health Emergency and Disaster Risk Management Framework comprises a set of functions and components that are drawn from multisectoral emergency and disaster management, capacities for implementing the IHR (2005), health system building blocks, and good practices from regions, countries and communities. The framework focuses mainly on the health sector, noting the need for collaboration with many other sectors that make substantial contributions to reducing health risks and consequences.

The success of the Health Emergency and Disaster Risk Management Framework relies on joint planning and action by ministries of health and other government ministries, the national disaster management agency, the private sector, communities and community-based organizations, assisted by the international community. At the core of effective health emergency and disaster risk management are efforts to strengthen a country's health system, with a strong emphasis on community participation and action to build resilience and establish the foundation for effective prevention of, preparedness for, response to and recovery from all types of hazardous events, including emergencies and disasters.

Annex 4. Examples of regional and international initiatives supporting multisectoral preparedness coordination

Oslo Ministerial Declaration: foreign affairs collaborative actions for global health

The Global Health and Foreign Policy Initiative was launched in New York in September 2006 at the instigation of foreign ministers from France and Norway. Also known as the Oslo Group, this initiative involves seven countries with different profiles, but which are all engaged in health action: Brazil, France, Indonesia, Norway, Senegal, South Africa and Thailand.

Their objectives are to build the case for increased prominence of global health in the international agenda, to demonstrate how foreign ministers and foreign policy could add value to health issues of international importance, and to show how a health focus could harness the benefits of globalization, strengthen diplomacy and respond to new thinking on human security.

In 2007, the seven foreign ministers issued the Oslo Ministerial Declaration with an agenda for collaborative actions by foreign ministers around three main interconnecting themes: capacity for global health security; facing threats to global health security; and making globalization work for all.

Capacity for global health security

Capacity for global health security includes the following foreign policy-related elements.

- **Preparedness and foreign policy.** This includes collaborative actions by foreign ministers to place health impacts at the centre of foreign policy and development strategies, engage in developing a roadmap for actions in large-scale disasters and emergencies, support national disaster planning and development of critical national capacity for emergency preparedness, and strengthen the capacity of the United Nations Secretary-General to assume a coordinating role in facilitating actions related to foreign policy in emergency preparedness and to identify critical gaps in capacity for effective implementation of the IHR (2005).
- **Control of emerging infectious diseases**

and foreign policy. This includes collaborative actions to commit to the early and full implementation of the IHR (2005), exchange experiences and best practices, identify gaps in implementation, support and facilitate WHO's leadership role, and support the mobilization of adequate resources.

- **Human resources for health and foreign policy.** This includes collaborative actions to support the development of a global framework for tackling the global shortage of health workers, encourage the development of broad national plans for human resources for health, and respond to the need to train more health workers and support health research.

Facing threats to global health security

The following measures to mitigate threats to global health security are identified.

- **Conflict.** Measures include collaborative actions to recognize the potential of health to initiate dialogue across borders and to spearhead the resolution of conflict, recognize the potential of global knowledge networks, support the evolution of a more consistent approach for monitoring suffering in conflict and war, and further develop the case for a health focus in post-conflict reconstruction.
- **Natural disasters and other crises.** Measures include collaborative actions supporting the work of the Office for the Coordination of Humanitarian Affairs and the Central Emergency Response Fund, ensuring that priority is given to restoring a functioning health system, and monitoring the equitable distribution of aid, taking account of the specific needs of caregivers and marginalized groups.
- **Response to HIV/AIDS.** Measures include collaborative actions to take up the challenges that HIV/AIDS presents to trade, human rights, peacebuilding, and humanitarian action, commit to the international agreements and political declarations linking and monitoring these commitments, and call for improved and disaggregated data collection on HIV/AIDS in all countries.
- **Health and the environment.** Measures include collaborative actions to make the links between environmental policies and global health visible in foreign policy engagements, recognize that the potential of biotechnologies to help developing countries should not be eclipsed by otherwise legitimate security concerns, and give

further attention to the potentially very severe consequences to health of climate change.

Making globalization work for all

Action to harness the benefits of globalization needs to be undertaken in the following areas.

- **Health and development.** This includes collaborative actions to give health top priority in the national and international cross-sectoral development agenda, strengthen the efficiency of global health initiatives, improve national and regional research capacity and the management capacity of public health systems, enhance the capacity for national and regional production of essential medicines, honour existing financial commitments, initiate innovative financing mechanisms, and work together with the International Monetary Fund and the World Bank.
- **Trade policies and measures to implement and monitor agreements.** This includes collaborative actions to affirm the interconnectedness of trade, health, and development, reaffirm commitment to the Doha Declaration on Trade-Related Aspects of Intellectual Property Rights, and foster the full implementation of flexibilities and explore and leverage multiple and innovative approaches to reduce price and improve access to essential medicines.
- **Governance for global health security agreements.** This includes collaborative actions to support policies for global health security in foreign policy dialogue and action arenas, establish broader and more coherent national leadership for global health issues, recognize and affirm the WHO Secretariat and the World Health Assembly as the main arenas for global health governance, recognize the role of the private sector, knowledge networks, and civil society organizations, and contribute to financing global health in ways that do not undermine existing commitments to development financing.

Pacific regionalism: a framework for sustainable development, economic growth, strengthened governance and security through a regional approach

Leaders of the Pacific Islands Forum in 2014 endorsed the Framework for Pacific Regionalism with a Pacific vision calling for a region of peace, harmony, security, social inclusion and prosperity.

Forum leaders in 2017 endorsed the “Blue Pacific” identity as the core driver of collective action to advance this vision, seeking to recapture the collective potential of the region’s shared stewardship of the Pacific Ocean based on an explicit recognition of a shared ocean identity, ocean geography, and ocean resources.

Four principal objectives underpin the Framework for Pacific Regionalism:

- sustainable development that combines economic, social and cultural development in ways that improve livelihoods and well-being and use the environment sustainably;
- economic growth that is inclusive and equitable;
- strengthened governance, legal, financial and administrative systems;
- security that ensures stable and safe human, environmental and political conditions for all.

The framework sets out a number of ways in which ambitious and transformative initiatives best addressed through a regional approach can be identified. Governments of the Pacific, through existing ministerial- and official-driven processes, are one important avenue. Another is the regional public policy consultation process. Through these mechanisms the framework provides a political platform that enables forum leaders to assert their collective sovereignty over the Pacific vision into the future. The framework prioritizes the regional political agenda, and in doing so provides all stakeholders with the opportunity to align their strategic direction and resources.

Regionalism can be expressed in several ways under the framework, including regional cooperation (regional agreements between national governments) and economic and political integration that can lead to shared sovereignty, shared political and legal institutions, and increased flows of people, goods and capital.

Implementation of effective forms of regional cooperation and integration is underpinned in the framework by an emphasis on greater political oversight and discussion by forum leaders around key issues such as political settlements, pooled resources and sovereignty, as well as an emphasis on ensuring that focused political discussion takes place that considers only issues best serviced through a form of regionalism, and by promoting a more inclusive approach to regional public policy development, such as health security.



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