International Labour Organization

World Health Organization

CARING FOR THOSE WHO CARE

Guide for the development and implementation of occupational health and safety programmes for health workers

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ABBREVIATIONS

AIDS	acquired immunodeficiency syndrome
COVID-19	novel coronavirus infectious disease
IEC	information, education and communication
HIV	human immunodeficiency virus
ILO	International Labour Organization
IPC	infection prevention and control
NHS	National Health Service
OHS	occupational health and safety
OSH	occupational safety and health
PPE	personal protective equipment
SDG	Sustainable Development Goal
TB	tuberculosis
UN	United Nations
WASH	water, sanitation and hygiene
WHO	World Health Organization

GLOSSARY OF KEY TERMS AND DEFINITIONS

Accreditation*:* A formal process by which a recognized body, usually a nongovernmental organization, assesses and recognizes that a health care organization meets applicable predetermined and published standards. Accreditation standards are usually regarded as optimal and achievable, and are designed to encourage continuous improvement efforts within accredited organizations. An accreditation decision about a specific health care organization is made following a periodic on-site evaluation by a team of peer reviewers, which is typically conducted every two to three years. Accreditation is often a voluntary process in which organizations choose to participate, rather than one required by law and regulation *(1)*.

Employer*:* Any physical or legal person that employs one or more workers *(2).*

Hazard*:* The inherent potential to cause injury or damage people's health *(2).*

Health facility*:* A place where health services (i.e. not limited to medical or clinical services) are provided with the aim of contributing to improved health or to the diagnosis, treatment and rehabilitation of sick people *(3)*.

Health system*:* All organizations, institutions and resources that produce actions whose primary purpose is to improve health *(4).*

Health workers*:* All people engaged in work actions whose primary intent is to improve health. This includes health service providers, such as doctors, nurses, midwives, public health professionals, laboratory technicians, health technicians, medical and non-medical technicians, personal care workers, community health workers, healers and practitioners of traditional medicine. The term also includes health management and support workers such as cleaners, drivers, hospital administrators, district health managers and social workers, and other occupational groups in health-related activities as defined by the International Standard Classification of Occupations (ISCO-08) *(5).*

Incident*:* An unsafe occurrence arising out of or in the course of work where no personal injury is caused *(2)*.

Infection prevention and control*:* A practical, evidence-based approach that prevents patients and health workers from being harmed by avoidable infection and as a result of antimicrobial resistance *(6).*

Joint labour-management committee for health and safety: a bipartite body composed by equal number of representatives of the employer and health workers, which is established at the health facility to ensure cooperation between the employer

and workers to achieve and maintain safe and healthy working conditions and environment *(7,8)*.

Risk*:* A combination of the likelihood of an occurrence of a hazardous event and the severity of injury or damage to people's health caused by this event *(2)*.

Risk assessment*:* The process of evaluating the risks to safety and health arising from hazards at work *(2)*.

Occupational health and safety (**OHS**) (**occupational safety and health** (**OSH**))*:* A multidisciplinary area of work aiming at the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations; the prevention among workers of departures from health caused by their working conditions; the protection of workers in their employment from risks resulting from factors adverse to health; and the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological capabilities *(9)*.

OSH management system*:* A set of interrelated or interacting elements to establish occupational health and safety policy and objectives, and to achieve those objectives. The system should contain the main elements of policy, organizing, planning and implementation, evaluation and action for improvement *(2)*.

Patient safety*:* A framework of organized activities that creates cultures, processes, procedures, behaviours, technologies and environments in health care that consistently and sustainably lower risks, reduce the occurrence of avoidable harm, make error less likely and reduce impact of harm when it does occur *(10)*.

Quality of care*:* The degree to which health services for individuals and populations increase the likelihood of desired health outcomes *(11)*.

Safety culture: The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies and patterns of behaviour that determine the characteristics of the organization's health and safety management. Organizations with a positive safety culture are characterized by communications based on mutual trust, by shared perceptions of the importance of safety, and by confidence in the efficacy of preventive measures *(12)*.

Workers' representative*:* Any person who is recognized as such by national law or practice, whether they are: trade union representatives (namely, representatives designated or elected by trade unions or by members of such unions); or elected representatives (namely, representatives who are freely elected by the workers of the organization in accordance with provisions of national laws or regulations or of collective agreements and whose functions do not include activities that are recognized as the exclusive prerogative of trade unions in the country concerned) *(13)*.

EXECUTIVE SUMMARY

Health workers, whose main aim is to improve people's health, can also suffer health problems because of their work.

Occupational health and safety programmes aim to prevent diseases and injuries arising out of, linked with or occurring in the course of work. Providing healthy and safe workplaces in the health sector contributes to improving the quality and safety of patient care, retention of health workers and environmental sustainability. The protection of health and safety of health workers should be part of the core business of the health sector – to protect and restore health and to cause no harm to patients and workers.

This guide provides an overview of the necessary elements of occupational health and safety programmes at national, subnational and facility levels, as well as advice for the development and implementation of such programmes with the participation of representatives of employers' and workers' organizations as well as other relevant stakeholders.

The programmes for occupational health and safety of health workers should be formulated, implemented, monitored, evaluated, and periodically reviewed in consultation with employers, workers, and their representatives.

National programmes for occupational health and safety for health workers should include the following elements:

- National policy statement on occupational health and safety for health workers issued at the highest possible level and communicated at all workplace levels in all management and practice environments in the health sector.
- A unit or person in charge of occupational health and safety of health workers designated in the ministry of health.
- A multistakeholder Steering Committee for health and safety in the health sector, involving employers' and workers' representatives, established at the national level to oversee and steer programme implementation, monitoring and evaluation.
- Regulations and standards for prevention and control of occupational health hazards in the health sector available in all health facilities.
- A set of objectives, targets and key indicators for monitoring and evaluation of programme implementation at the national, subnational and facility levels available and integrated into the national health information system.
- Established mechanisms for efficient financing of measures for the health and safety of health workers.

- Adequate human resources for occupational health and safety for health workers in sufficient numbers, and technical knowledge and skills available at all levels of health systems.
- Adequate supplies and commodities including personal protective equipment, vaccines, safe medical devices, equipment and tools for safe work readily available at all levels of the health system.
- Standards for the provision of occupational health services for health workers available, along with a system for quality assurance and a programme for their expansion.
- Policies for the provision of support services for health workers addressing human immunodeficiency virus (HIV), tuberculosis (TB), and hepatitis B and C services for health workers.

Facility programmes for occupational health and safety require the following elements to be put in place:

- A written facility occupational health and safety policy available in all health facilities.
- Focal points for occupational health and safety designated and trained in all health facilities.
- Joint labour–management committees for health and safety, as required by national regulations, appointed, meet regularly with meetings documented.
- A regular training programme and safety briefing plan for all health workers and specific target groups that is designed, planned and implemented.
- Risk assessments, prevention and mitigation of occupational hazards that are regularly carried out and documented.
- Action plans for work improvement that are developed, implemented, monitored and evaluated, in collaboration with safety and health committees and/or workers' representatives.
- A policy for the necessary vaccination of health workers according to the national immunization policy and the specific occupational health hazards.
- Immunization against vaccine-preventable diseases that is provided at no cost to health workers, ensuring that all required doses of immunizations have been received by all workers at risk, including cleaners and waste handlers.
- Standard operating procedures for reporting accidental exposures to occupational hazards and incidents, while eliminating barriers to reporting and providing a blame-free environment.
- Arrangements for recording and notification of occupational accidents, occupational diseases, and as appropriate, dangerous occurrences, commuting accidents and suspected cases of occupational diseases.
- Services for early detection, diagnosis, treatment, care, notification and support for occupational diseases and injuries including occupational infections – such as HIV, hepatitis B and C, TB, COVID-19 – are provided at no cost to workers while maintaining confidentiality.

- A set of indicators and a system for regular collection, tracking, analysing, reporting and acting upon disaggregated data to promote the health and safety of health workers.
- Adequate provisions for water and sanitation, facilities for personal hygiene, clothing, rest, dining, safe handling and management of health care waste, and safety protocols for the use of hazardous chemicals.
- Standard operating procedures for protection of the health and safety of health workers and first responders in extreme weather events.

Programme development is a process with the following steps:

- Build political commitment for developing the programme.
- Assess the current situation.
- Establish a task force, including representatives of workers, representatives of employers and other key stakeholders and ensure their engagement.
- Write the first draft of the programme
- Carry out a feasibility assessment.
- Discuss the first draft at a meeting with key internal and external stakeholders.
- Develop a second draft and invite representatives of workers, employers and other stakeholders to comment.
- Finalize, obtain approval, publish and disseminate the programme description.

Programme implementation requires the following actions:

- Develop a plan of action for roll-out of the implementation at different levels in stages.
- Arrange for external inspection, audit and licensure.
- Develop communication and technical tools for implementation.
- Build capacities for implementation.
- Monitor and evaluate the programme.

The current guide is intended for use by technical experts, members of joint labour–management health and safety committees and focal points for occupational health and safety for health workers at the national, subnational and facility levels – who are typically in charge of developing and implementing occupational health and safety programmes for health workers – as well as by facility managers, occupational health service providers, representatives of workers and employers and other relevant stakeholders.

INTRODUCTION

All health workers have one main aim – to improve people's health. Health workers are the backbone of any functioning health system. While contributing to the enjoyment of the right to health for all, health workers should also enjoy the right to healthy and safe working conditions to maintain their own health. Unsafe working conditions are among the main reasons for strikes among health workers in low-income countries *(14)*. Poor well-being and occupational burnout among health workers are associated with poor quality of care and negative patient safety outcomes such as medical errors *(15)*.

Unsafe working conditions, stress, or the perceived lack of security in some countries, are among the main reasons for the attrition of health workers, exacerbating health workforce shortages *(16,17)*. Unsafe working conditions resulting in occupational illness, injuries and absenteeism, also represent a significant financial cost for the health sector. In 2017, for instance, the annual costs of the occupational illnesses and injuries in the health care and social services sector in Great Britain were the highest among all sectors, estimated at equivalent of US$ 3.38 billion *(18)*. Improving health, safety and wellbeing of health workers lowers the costs of occupational harm (estimated at up to 2% of health spending) and contributes to minimizing patient harm (estimated at up to 12% of health spending) *(19)*.

There are many international commitments, conventions and resolutions on healthy and safe working conditions for health workers. Respecting labour rights and providing safe and healthy working environment for all workers, including health workers, is one of the global commitments under Sustainable Development Goal 8 on decent work and economic growth (SDG8.8) *(20)*.

At the United Nations (UN) High-level Meeting on Universal Health Coverage held at the 74th session of the UN General Assembly in 2019, all heads of state and governments committed to scale up efforts to promote healthier and safer workplaces, to increase the access of workers to occupational health services and to take action to improve the protection of health, safety and well-being of health workers *(21)*.

In the 13th General Programme of Work of the World Health Organization (WHO), the Member States committed to pay special attention to decent working conditions for health workers *(22)*. With Resolution WHA74.14 from 2021 on protecting, safeguarding and investing in the health and care workforce, the World Health Assembly called upon Member States "to take the necessary steps to safeguard and protect health and care workers at all levels, through the equitable distribution of personal protective equipment, therapeutics, vaccines and other health services, effective infection prevention control and occupational safety and health measures within a safe and enabling work environment that is free from racial and all other forms of discrimination *(23)*". Furthermore, at the 74th World Health Assembly in 2021, the global patient safety action plan 2021–2030 was adopted, which includes a strategic objective for health worker education, training and safety *(24)*.

The International Labour Organization (ILO) Centenary Declaration on the Future of Work states that safe and healthy working conditions are fundamental to decent work *(25)*. The ILO Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187) urges Member States to develop a national policy, national system and national programme on occupational safety and health, in coordination with other national programmes and plans *(26)*. Other ILO conventions relevant for protecting health and safety of health workers include the Occupational Safety and Health Convention, 1981 (No. 155) *(27)*, Protocol of 2002 to the Occupational Safety and Health Convention, 1981 *(28)* and the Occupational Health Services Convention, 1985 (No. 161) *(29)*. Furthermore, the Global call to action for a human-centred recovery from the COVID-19 crisis that is inclusive, sustainable and resilient, adopted by the International Labour Conference in 2021, urges governments and social partners to ensure health workers and all other frontline workers have access to vaccines, personal protective equipment, training, testing and psychosocial support, and that they are adequately remunerated and protected at work, including against excessive workloads *(30)*. Also, the ILO Nursing Personnel Convention of 1977 (No. 149) provides for adapting existing laws and regulations on occupational health and safety to the special nature of nursing work and of the environment in which it is carried out *(31)*.

Occupational health and safety problems in the health sector

The health care sector is composed of a web of institutions, occupational groups and diverse work environments. The exposure to occupational hazards varies by settings, occupations and tasks.

The most common occupational hazards for health workers *(32)* are:

- Occupational infections – tuberculosis, hepatitis B and C, HIV, respiratory infections (e.g. coronaviruses, influenza) and vector-borne diseases (e.g. malaria, dengue).
- Ergonomic hazards – unsafe patient handling, heavy lifting, awkward postures causing back injury, chronic low back and neck pain and other musculoskeletal disorders.
- Hazardous chemicals – cleaning and disinfecting agents, mercury, latex allergy, toxic drugs, insecticides for vector control.
- Exposure to radiation – ionizing (x-rays and radionuclides) and non-ionizing (lasers, ultraviolet).
- Psychosocial hazard – time pressure, lack of control over work tasks, long working hours, shift work and lack of support.
- Violence and harassment – physical, sexual and psychological abuse and harassment at work.
- Risks in the ambient work environment – thermal discomfort (heat or cold stress) and noise.

- Injuries – slips, trips and falls, road traffic injuries (ambulance crashes, motorbike and bicycle injuries), electric shock, explosions, fire.
- Environmental health risks – inadequate water, sanitation and hygiene, health care waste, climate-related risks.

The exposure to occupational hazards is amplified by health worker shortages and maldistribution, lack of supportive supervision, poor building design and maintenance, lack of hygiene facilities and supplies, lack of training and information on occupational risks, the introduction of new ways of working and technologies, environmental change, and other issues.

A WHO e-tool provides details about these hazards along with action points for their prevention and control from the existing WHO guidelines is available at http://www.who.int/tools/occupational-hazards-in-health-sector. Additional information about relevant ILO standards and tools is available at https://www.ilo.org/global/industries-and-sectors/health-services/lang--en/index.htm.

Occupational health and safety programmes for health workers

The WHO–ILO Joint global framework for national occupational health programmes for health workers, adopted in 2010, provides strategic guidance for establishing the building blocks of occupational health and safety programmes at national and facility levels *(7)*. The purpose of the national programmes is to ensure both the protection of the health and safety of health workers and the compliance of the health sector with national occupational health and safety regulations, while contributing to improving patient safety and the quality of patient care and providing opportunities for decent work in the health sector.

The key elements of the WHO–ILO joint global framework, as agreed by ILO's Governing Body in 2010 *(7)*, are summarized in Box 1.

These elements provide the basis for the development of occupational health and safety programmes for health workers (Fig. 1) and are further detailed in subsequent chapters.

Box 1. Key elements of national occupational health programmes for health workers according to the WHO–ILO joint global framework of 2010

Identify a **responsible person** with authority for occupational health at both the national and workplace levels.

Develop a **written policy** on safety, health and working conditions for health workforce protection at the national and workplace levels.

Ensure access to **occupational health services** by strengthening existing, or establishing new, occupational health programmes, and allocating sufficient resources to the programme, occupational health professional services, and the procurement of the necessary personal protective equipment and supplies.

Create joint labour–management **health and safety committees** with appropriate worker and management representation.

Provide ongoing (or periodic) **education and training** that is appropriate to all parties, including occupational health practitioners, senior executives, front-line managers, health and safety committee, front-line workers and their representatives, and the general public.

Identify hazards and hazardous working conditions in order to prevent and control them and manage risks by applying the occupational health hierarchy of controls, which prioritizes elimination or control at the source.

Provide pre-service and ongoing **immunizations** against hepatitis B and other vaccine-preventable diseases in the workplace at no cost to the employee and ensure that all three doses of the hepatitis B immunization have been received by all workers at risk of blood exposure (including cleaners and waste handlers).

Promote **exposure and incident reporting,** eliminating barriers to reporting and providing a blame-free environment.

Promote and ensure health worker access to **diagnosis, treatment, care and support** for HIV, TB, hepatitis B and hepatitis C viruses.

Utilize appropriate **information systems** to assist in the collection, tracking, analysis, reporting and acting upon data to promote health and safety of the health care workplace and health workforce.

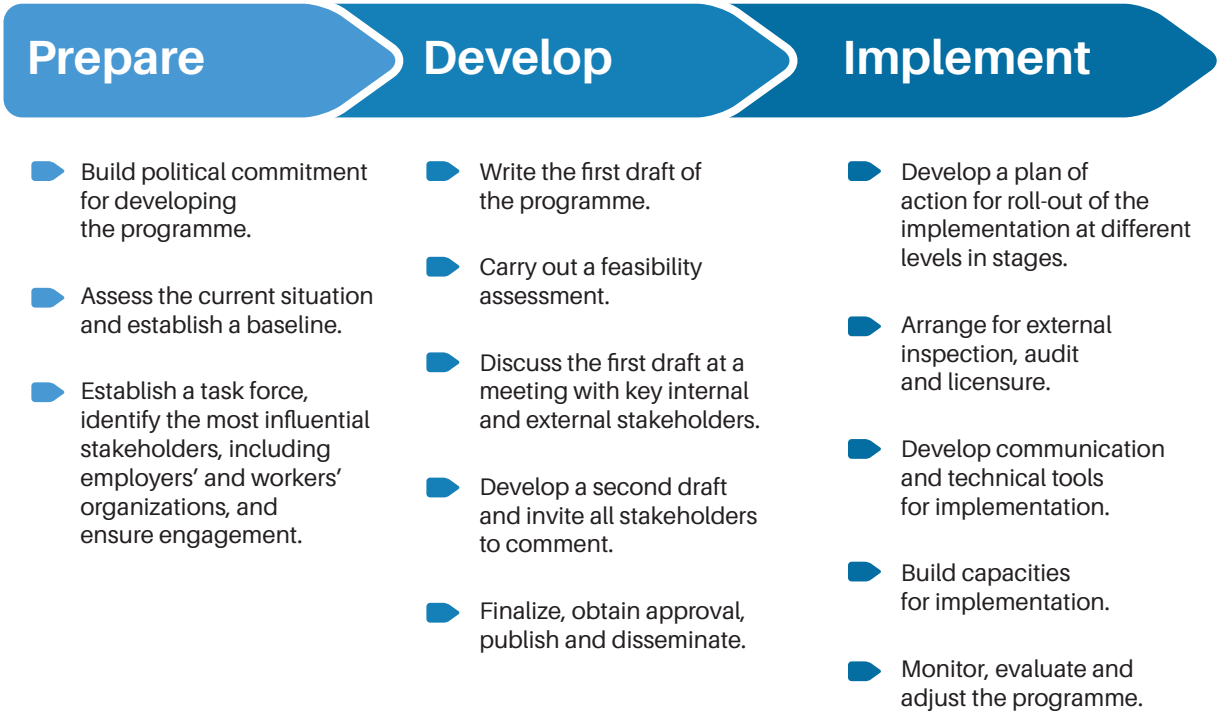
Ensure that health workers are provided with entitlement for **compensation for work-related disability** in accordance with national laws.

Promote **research** on occupational health and safety issues of concern to health workers and translation of research into practice, particularly with respect to combined exposures and applied intervention effectiveness research.

Promote and implement **greening health sector initiatives** that incorporate occupational health and green and safe jobs while reducing greenhouse gas emissions with a preference for: the use of renewable energy; providing safe drinking water; promoting hand hygiene; active transport; environmentally preferable management of hazardous health care waste; and environmentally preferable selection and disposal of chemicals such as pesticides, disinfectants and sterilants.

Source: WHO–ILO Global Framework for National Occupational Health Programmes for Health Workers, in in 309th Session of ILO Governing Body (2010), The sectoral dimension of the ILO's work: Review of sectoral initiatives on HIV and AIDS (document GB.309/STM/1/2, appendix II.) (https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_145837.pdf, accessed 3 December 2021).

Figure 1. Development and implementation of occupational health and safety programmes for health workers



Principles for the development and implementation of occupational health and safety programmes in the health sector

The development and implementation of programmes for occupational health and safety for health workers should take into consideration the following principles:

- Employers of health workers have the duty to implement occupational health and safety measures for the prevention of occupational and work-related diseases and injuries, while health workers, like all other workers, have the right to healthy and safe working conditions and the duty to comply with the instructions for health and safety and take reasonable care of their own safety *(27)*.
- Occupational health and safety (OHS) measures require a system for management, continuous improvement and regular dialogue between employers, workers and their representatives and involvement of other stakeholders, such as professional associations of health workers and patient groups *(2,27)*.
- The efficiency of the occupational health programmes can be increased by establishing synergies or banding with programmes targeting health workers and health facilities, such as programmes on the quality and safety of care, including infection prevention and control (IPC) and patient safety, health workforce management, and environmental health *(24,33,34)*.

- National and subnational programmes should aim to cover all health workers in all types of health facilities in public, private and nongovernmental settings as well as in health facilities with other forms of ownership and governance. Programmes in health facilities should also aim to include the health and safety of subcontractors, suppliers and also, where applicable, community health workers.
- The programmes at national, subnational and facility levels should be implemented in a sustainable way to ensure continuous protection of the health and safety of health workers at all times, including during public health and other emergency situations.
- The development and implementation of the programmes should be gender-responsive, non-discriminatory and inclusive, taking into account the special needs of female health workers, migrant health workers, vulnerable groups and workers with precarious employment conditions.

About this guide

Purpose of the document

The purpose of this document is to present the key elements of occupational health and safety programmes for health workers at the national, subnational and facility levels, and to provide guidance on the development and implementation of such programmes.

Occupational health and safety programmes aim to prevent diseases and injuries occurring in the course of, linked with or arising out of work. Providing healthy and safe workplaces in the health sector contributes to improving quality of care and patient safety, health worker retention as well as environmental sustainability. Consequently, protection of the health and safety of health workers should be part of the core business of the health sector – to protect and restore health without causing harm to patients and health workers.

Target audience

The main target audiences of this document are the focal points for occupational health and safety for health workers, policy-makers, senior managers, employers, health workers and their representatives and other professionals with the mandate of, or interested in, developing or strengthening occupational health and safety programmes in the health sector at the national, subnational and facility levels. Members of labour–management committees for health and safety and occupational health service providers, inspectors and auditors, employers and workers in the health sector and their representatives and the professional associations of health care providers are also critical target audiences for this document. The document could also be helpful to other stakeholders – such as those responsible for health care quality improvement, patient safety, IPC, management of human resources for health, environmental health, health facility accreditation/regulation, public health and

infectious disease control and surveillance. International organizations, development agencies and donors involved in supporting the development or implementation of occupational health and safety programmes for health workers will also benefit from using this document.

Development and structure of the document

Existing national policy instruments for protection of the health and safety of health workers were identified through an online survey and internet search. The content analysis of the national policy instruments served to identify countries' experiences to illustrate the different elements of national programmes for health workers described in this guide. In addition, a WHO virtual expert workshop reviewed country experience and lessons learned in implementing national programmes *(35)*.

The draft document was reviewed by a group of international experts and professionals working in the field of occupational health and safety for health workers. The review took place at a virtual meeting convened by WHO, and relevant international stakeholders were invited to submit comments. The development of this guide was driven by a steering group composed of WHO and ILO staff from relevant technical programmes.

The document includes two parts:

- **Part 1** describes the key elements of occupational health and safety programmes at the national, subnational and facility levels.
- **Part 2** provides practical advice for national and subnational authorities, and facility managers for the development and implementation of occupational health and safety programmes for health workers.

Examples from existing occupational health and safety programmes are provided throughout the document for illustration of the content.

PART 1.

PROGRAMMES FOR OCCUPATIONAL HEALTH AND SAFETY OF HEALTH WORKERS

A programme on occupational health and safety for health workers provides a framework and mechanisms for actions to protect the health, safety and well-being of workers in the health sector. The ultimate purpose is to provide a healthy and safe working environment for all health workers as a fundamental part of decent work. This contributes to improving the productivity, job satisfaction and retention of health workers. The programme facilitates the regulatory compliance of health facilities with national laws and regulations on occupational health and safety, bearing in mind the specific working conditions and occupational hazards in the sector. By providing mechanisms and procedures for implementation of key interventions to protect the health and safety of health workers and emergency responders, the programme also contributes to increasing the resilience of health services in the face of outbreaks and public health emergencies.

The programmes for occupational health and safety for health workers contribute to strengthening the performance of health systems through: [1] preventing occupational diseases and injuries; and [2] protecting and promoting the health, safety and well-being of health workers – thereby improving the quality and safety of patient care, health workforce management and environmental sustainability.

The development and implementation of programmes for occupational health and safety of health workers involves action at three levels: national, subnational or district, and the health facility level.

This section describes the content and the key deliverables of the occupational health and safety programmes at these three levels, which are of equal importance.

CHAPTER 1.

NATIONAL PROGRAMMES

At the national level, countries may have several national programmes that are related to protecting the health and safety of health workers.

Many countries have comprehensive acts on health and safety at work and cross-sectoral national programmes and systems developed in accordance with the ILO Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187) *(26)*. Programmes for occupational health and safety for health workers have to be aligned with the existing general national legislations, regulations, policies, programmes and systems concerning health and safety at work.

Other programmes within the health sector may also aim at addressing different aspects of the health and safety of health workers, such as:

- Health care quality and safety – quality of health services, patient safety, IPC *(24, 34, 36)*.
- National programmes for immunization.
- Disease control programmes – tuberculosis (TB), human immunodeficiency virus and acquired immunodeficiency syndrome (HIV/AIDS) and viral hepatitis, including intervention for providing specific services for health workers to prevent and control the spread of these diseases among the health workforce.
- Health workforce management in terms of staffing levels, skills development, work organization, supervision, and education and training.
- Environmental health – climate-resilient and environmentally sustainable health services, water and sanitation, health care waste management, safe use of chemicals and radiation *(33)*.

Therefore, it may be efficient to coordinate the delivery of interventions, procurement, planning, reporting and capacity-building for occupational health and safety with other national health programmes targeting health workers and health facilities to avoid duplication, overlapping and misalignment and to increase efficiency in the use of resources. WHO recommends that the planning and delivery of health programmes is organized according to the basic functions of health systems – stewardship/governance, generation of human and physical resources/inputs, financing, and service delivery *(37)*.

1.1. Governance and stewardship

KEY DELIVERABLES:

- A national policy statement on occupational health and safety for health workers is issued at the highest possible level and communicated at all levels of workplaces in all management and practice environments in the health sector.
- A unit is designated at the national level to take charge of the occupational health and safety of health workers.
- A multistakeholder Steering Committee for health and safety in the health sector is established at national level to oversee and steer programme implementation.
- Regulations and standards for prevention and control of the most common occupational health hazards in the health sector are available in all health facilities.
- A set of key indicators for monitoring programme implementation at the national, subnational and facility levels is available and integrated into the national health information system.

For the purpose of the occupational health and safety programmes, governance and leadership are the ways the health system is run and how the institutions involved in it, both public and private, are overseen in order to ensure adequate level of protection of health and safety of health workers. This requires the setting of objectives and directions, planning and monitoring, and regulating occupational health and safety in the health sector, as well as collecting information and using it for identifying related trends and monitoring and evaluating performance.

The following elements of occupational health and safety programmes for health workers aim at strengthening governance and stewardship.

1.1.1. National policy statement

A national policy statement on occupational health and safety in the health sector is essential because it lays down the overall intentions and direction of the health system in relation to its performance in protecting the health and safety of health workers. The policy statement highlights the commitment of the leadership of the health system to protecting the health and safety of all health workers in accordance with the overall national objectives related to decent work and universal health coverage. For example, a policy statement could:

- Express political commitment and set a vision for health, safety and well-being of all health workers.
- Outline the major policy steps and instruments to achieve this vision.
- Mandate the establishment of mechanisms for collaboration and implementation, including collaboration and consultation with employers' and workers' representatives.
- Emphasize the duty of care of employers in the health sector to protect the health and safety of workers.
- Outline the duties and responsibilities of employers, managers and health workers in ensuring the health and safety of health workers.
- Establish links between occupational health, quality of care, patient safety, IPC, human resources for health, and environmental sustainability.
- Underscore commitment to ratify and apply the relevant international labour standards and public health recommendations

Boxes 2 and 3 summarize the national policy statements of England and Togo respectively, and Box 4 provides an example from Kenya on the organization of the programme for occupational health and safety of health workers at national, subnational and facility levels.

Box 2. Health and safety policy within the National Health Service in England

The National Health Service (NHS) in England has issued a policy statement on health and safety in compliance with the legislative requirements of the Health and Safety at Work Act 1974. The policy applies to employers, employees, contractors, agency staff and visitors of the NHS. It communicates a clear statement of intent on the protection of workers as a statutory requirement to minimize the incidence of all workplace risks. It stipulates the roles and responsibilities of employees, senior management of the NHS, regional directors and health and safety managers. The policy statement also specifies arrangements for implementation, distribution, monitoring and an equality impact analysis to ensure that the policy does not inadvertently discriminate against any groups of NHS staff.

Source: NHS England, Health and Safety Policy, 2017 (https://www.england.nhs.uk/publication/health-and-safety-policy/, accessed 11 October 2021).

Box 3. National policy statement on occupational health and safety for health workers in Togo

The policy statement is described by the Minister of Health as follows:

"The strategic occupational health and safety plan for health workers in Togo for the period 2017–2022 aims at improving the management of occupational safety and health for health workers for better working conditions, employment and quality of care in four directions:

- strengthening of the institutional and legal framework;
- promotion of occupational safety and health for health workers;
- capacity-building of actors in the management, and initial training and equipment for occupational safety and health for health workers;
- strengthening of coordination, monitoring and evaluation, research and management of occupational health and safety in health-care settings.

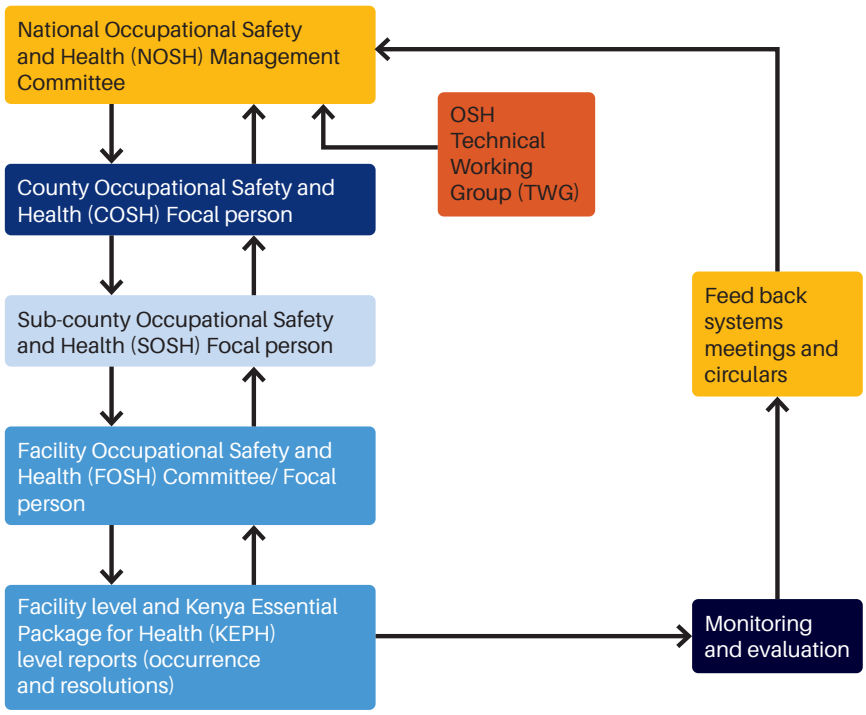
I call for the support of all – technical and financial partners, civil society, health care providers, private and public health services – for the pursuit of coordinated and participatory actions for the effective implementation of this plan."

Minister of Health and Social Protection
17 June 2017, Lomé

Source: Plan stratégique de sécurité et santé au travail pour le personnel de santé au Togo, 2017–2022. Lomé: 2017 (https://divprosante.tg/wp-content/uploads/2021/08/Plan-strategique-SST-PS_Togo-2017-2022_VF-3.pdf, accessed 11 October 2021).

Box 4. Organizational structure of national, subnational and facility authorities for occupational health and safety for health workers in Kenya

The occupational health and safety policy guidelines for the health sector in Kenya provide guidance on the roles of responsible authorities for occupational health and safety for health workers at national, subnational and facility levels *(38)*. The organizational structure of these authorities is shown below:



In 2021, organizational arrangements were made within the Ministry of Health to better link the implementation of the occupational health and safety policy guidelines for the health sector with the national programme for patient safety.

Source: Occupational safety and health policy guidelines for the health sector in Kenya. Nairobi: Ministry of Health; 2014 (https://www.health.go.ke/wp-content/uploads/2015/09/OCCUPATIONAL%20HEALTH%20AND%20SAFETY%20POLICY%20GUIDELINES%20FOR%20THE%20HEALTH%20SECTOR%20IN%20KENYA.pdf, accessed 11 October 2021).

1.1.2 Unit in charge of occupational health and safety for health workers at the national level

To ensure that the political will expressed in the national policy statement is put into practice, it is critical to identify a unit (or at minimum a focal point) within the ministry of health or another national authority, as appropriate, that has technical expertise and is assigned – or preferably mandated – by national regulation or administrative orders with the responsibility for managing occupational health and safety for health workers. Such a unit should be well positioned to collaborate with other relevant national public health programmes in the areas of environmental health, quality of care, patient safety and health workforce management with the national authorities responsible for occupational health and safety in all sectors.

The functions of the national unit in charge of occupational health and safety for health workers could include:

- To develop policies and guides for implementation of measures for protecting and promoting health, safety and well-being of health workers.
- To collaborate with other national health programmes – such as quality of care, IPC, patient safety, health workforce management, environmental health, and emergency preparedness and response.
- To consult with workers' and employers' representatives in the health system.
- To organize national information campaigns to promote safe work practices and healthy behaviours among health workers.
- To organize and manage the collection of data and monitoring of trends in work-related health impacts and implementation of occupational health and safety programmes for health workers in collaboration with the national health information system.
- To develop and support the implementation of a programme for the health surveillance of health workers.
- To organize monitoring of the compliance of health facilities with the regulations and standards for occupational health and safety.
- To advise on, and where appropriate plan, the procurement of supplies and commodities needed for occupational health and safety for health workers at national level.
- To liaise with the government department responsible for enforcement of occupational health and safety regulations regarding the compliance of health facilities with national laws and regulations.
- To advise, and where appropriate participate in, the central procurement of supplies and commodities including personal protective equipment (PPE), vaccines for health workers, safer medical devices, tools and equipment for safe work.
- To ensure effective and efficient use of resources for occupational health and safety for health workers through establishing budget and integrated resource planning.

1.1.3. National Steering Committee

It may be useful to establish a national Steering Committee for occupational health and safety for health workers. The Steering Committee can ensure sustainability of the programme, coordinate the inputs of other relevant national programmes, consult and involve employers' and workers' organizations and other key stakeholders, and can sustain the commitment for implementation. Ideally, the Steering Committee should be established by order of the minister responsible for health in consultation with the minister responsible for labour. In addition to the unit in charge of occupational health and safety for health workers, the composition of such a committee should include members representing:

- The relevant national programmes that target health workers and health services – such as occupational health and safety, quality of care, patient safety, IPC, human resources for health, environmental health, emergency preparedness and response and, where appropriate, some disease control programmes such as TB and HIV.
- Government agencies responsible for labour and employment, occupational health and safety and radiation.
- Organizations of employers and workers in the health sector, hospital federations, relevant civil society groups, accreditation bodies and representatives of health professional associations, (e.g. medical and nursing associations).

It is useful to note that seven in every 10 health workers globally are women *(39)*. Thus, it would be important to aim for a gender balance in the membership of the Steering Committee. Also, in many countries migrant health workers constitute a significant part of the health workforce. Therefore, committee membership should reflect a commitment to equity and diversity, including gender, ethnicity and occupational groups represented. The Steering Committee should meet as regularly as practical, decisions should be made by consensus as far as is practical and should be duly documented and communicated.

The tasks of a national Steering Committee for occupational health and safety for health workers could include:

- To identify the most common hazards and trends in the health and safety of health workers.
- To develop, review and update policy guidelines on prevention of occupational hazards, occupational and work-related injuries and illnesses among health workers.
- To coordinate the implementation of these policy guidelines in line with other policy initiatives and government regulations
- To liaise with the national tripartite committee responsible for occupational health and safety, if it exists.
- To provide guidance on the development or improvement of the systems for management of occupational health and safety in the health sector, including occupational health services.

- To consider and make recommendations to improve working conditions and occupational health and safety in the health sector.
- To develop proposals for senior policy-makers on matters related to occupational health and safety of health workers.
- To ensure involvement of organizations of employers and workers in the health sector on the development and implementation of occupational health and safety policies and activities.
- To establish a national research agenda on occupational health and safety for health workers.
- To design or commission standardized education and training in occupational health and safety in order to build the capacity of managers and workers with responsibilities for occupational health and safety.
- To promote awareness-raising campaigns among health workers.
- To review national reports on the state of occupational health and safety in the health sector.
- To coordinate the protection of occupational health and safety of health and emergency aid workers in the preparedness for and response to public health emergencies.
- To devise a plan for developing human resources for occupational health and safety from the national level to facility level.

1.1.4. Regulations and standards

Many countries have a comprehensive Occupational Health and Safety Act covering all public and private workplaces, including health services and facilities. However, the scope of these regulations may not cover workers without formal employment contracts, such as community health workers. In some countries, existing occupational health and safety regulations may not cover certain sectors and activities, such as public services and civil servants. A large proportion of health workers may, therefore, lack regulatory coverage for occupational health and safety. Consequently, the specific laws and regulations for prevention, insurance and compensation for occupational diseases and injuries may not apply to all health workers.

It is therefore important to review existing laws and regulations and their regulatory and effective coverage of health workers and health facilities. There may be a need to introduce a national regulation for the management of occupational health and safety in all health facilities and workplaces, both public and private, stipulating the duties for establishment of facility occupational health and safety policies, appointment of focal points for occupational health and safety for health workers and committees for health and safety at work, the role of occupational health services, workplace risk assessment, the reporting and monitoring of key performance indicators, and monitoring of implementation. Consideration should be given to national protection, insurance or pooled support for individual practitioners or small employers who either are not covered by the regulations or who have insufficient capacities to implement

comprehensive occupational health and safety programmes. Some countries have introduced specific regulations and standards for occupational health and safety of health workers. As an example, Box 5 summarizes the national regulations on occupational hazards for health workers in Brazil.

Specific guidelines and practical tools may need to be developed and made available to the target health facilities. For example, these could address the following topics:

- Vaccination of health workers.
- Safe patient handling.
- Safe use of hazardous chemicals (e.g. disinfectants, hazardous drugs) and the elimination of mercury from medical devices.
- Occupational safety in the medical use of radiation.
- Norms and standards for an ambient work environment (e.g. noise, microclimate).
- Safe working hours, overtime and paid time off work.
- Prevention of occupational injuries.
- Education and training of workers and managers on preventive actions.
- Programmes for prevention of violence and harassment.
- Prevention, reporting and follow-up of occupational infections.
- PPE specifications and procurement.
- Medical surveillance protocols for the various hazards present in health facilities.
- Monitoring and surveillance of practice activities.
- Blame-free reporting of incidental exposures to pathogens and incidents of violence and harassment.
- Provision of HIV and TB services for health workers.
- Availability and provision of services for mental health and psychosocial support for health workers.

Box 5. National regulations on occupational health hazards for health workers in Brazil

The Ministry of Labour and Social Affairs of Brazil (MTPS) has 36 regulations (NR) about occupational health and safety that organizations must follow. There are general, special and sectoral regulations. General regulations apply to all organizations, special regulations are specific to some activities, and sectoral regulations cover specific sectors of the economy.

In 2005, MTPS issued NR 32 – Occupational Safety and Health in Health Services – which was updated in 2008, 2011 and 2019. NR 32 is a specific regulation for health services, but organizations must follow other applicable regulations (e.g. NR 9 – Environmental Risk Prevention Program, and NR 5 – Internal Committee for Accident Prevention). NR 32 established measures to control the risks and conditions of work in health-care facilities, including:

- biological risks and vaccination;
- chemical risks;
- ionizing radiation;
- waste management and laundry services;
- cleaning and disinfection practices;
- comfort conditions during meals;
- maintenance of machinery and equipment;
- other environmental risks (e.g. noise, lighting, thermal comfort, cleanliness, vector control, hand hygiene); and
- the needlestick and sharp injuries prevention program.

The review and elaboration of new regulations are discussed on a Tripartite Commission (CTPP), which is coordinated by the MTPS with the participation of the Ministry of Health, workers and employers. Moreover, the MTPS develops in advance an impact analysis document and submits it for public consultation.

These norms must be considered with those of the Brazilian Health Regulatory Agency (Anvisa) and the Ministry of Health (see also Box 35).

Sources (in Portuguese): https://www.gov.br/trabalho-e-previdencia/pt-br/composicao/orgaos-especificos/secretaria-de-trabalho/inspecao/seguranca-e-saude-no-trabalho/normas-regulamentadoras/nr-32.pdf ; https://www.gov.br/trabalho-e-previdencia/pt-br/composicao/orgaos-especificos/secretaria-de-trabalho/inspecao/seguranca-e-saude-no-trabalho/ctpp-nrs/normas-regulamentadoras-nrs (both accessed 11 October 2021).

Guidelines or standard codes of practice may be needed for specific workplace settings in the health sector, such as mental health institutions, operating theatres, emergency departments, long-term care facilities, oral health centres, maternity and child health services, and the work of community and home-based health workers.

1.1.5. Information and research

The national programme should have clear objectives and indicators to monitor progress towards achieving these objectives (see Box 6 for the indicators used for monitoring the health, safety and well-being of health workers in Zanzibar). The programme should specify what data (where appropriate disaggregated by sex) will be collected from health facilities and other practice settings, the subnational health authorities, and national sources of information such as vaccination coverage and notifications of occupational diseases and injuries. Data collection, analysis and use should respect applicable laws, regulations and standards on privacy and safety.

Box 6. Indicators for monitoring the health, safety and well-being of health workers in Zanzibar, United Republic of Tanzania

In 2018, the Ministry of Health of Zanzibar adopted national policy guidelines for occupational health, safety and well-being in the health system. The guidelines define the following indicators and requirements for monitoring at the national level:

- the proportion of health facilities with more than 10 permanent employees with an established joint labour–management committee for occupational health, safety and well-being;
- the proportion of health facilities with appointed focal points for occupational health, safety and well-being;
- the proportion of health facilities with inspection of occupational health, safety and well-being by district health officers and occupational health and safety inspectors;
- the incidence of cases of blood exposure (i.e. blood splashes, needlesticks and sharps injuries) – number of reported cases per 1000 health workers;
- the incidence of cases of violence (i.e. physical, verbal, sexual harassment) – number of reported cases per 1000 health workers;
- the incidence of sickness absence due to low back pain – number of cases of absence per 1000 health workers;
- the incidence of work accidents – number of reported work accidents per 1000 health workers;
- the incidence of occupational diseases – number of registered occupational diseases per 1000 health workers;
- the total number of health workers trained in occupational health, safety and well-being in health facilities;
- the number of meetings of the National Committee for Occupational Health, Safety and Well-being in the Health System;
- the proportion of health workers covered by preventive medical examinations; and
- the total number of cases of post-exposure prophylaxis (HIV, hepatitis B virus).

Source: The Zanzibar policy guidelines for occupational health, safety and wellbeing of workers in the health system. (https://www.afro.who.int/sites/default/files/2021-08/Zanzibar_Policy_Guidelines_web_ready.pdf) *(40)*.

Awareness campaigns using information, education and communication (IEC) approaches can be sponsored at the national level. IEC campaigns should emphasize the importance of health workers' occupational health and safety and should be linked to patient safety and the quality of care. IEC campaigns can be linked to vaccination campaigns (see Box 7), campaigns on epidemic diseases or campaigns on specific occupational health and safety issues such as violence and harassment, mental health and well-being, patient handling and low back pain, TB, HIV, hepatitis, COVID-19 etc.

Box 7. Mass immunization of health workers: the case of Peru

Peru has the distinction of being the first country in the world to start working towards the goal of full hepatitis B vaccine coverage for health care workers under the Global Plan of Action on Workers' Health which was adopted by the World Health Assembly in 2007. To ensure the availability of vaccines in all health facilities in the country, the logistic systems of the Ministry of Health, Ministry of Social Security, the armed forces and some health institutions in the private sector were used.

Initially, support for the hepatitis B immunization programme was high, with 95.5% of health workers receiving the first dose in April 2008. However, only 75% returned for a second dose, and only 53.5% of workers took the third and final dose in October the same year.

The opposition was spearheaded by doctors who argued that the vaccine contained high levels of thimerosal, a preservative that contains ethyl mercury. A short film developed by WHO and dubbed into Spanish had been especially effective in increasing vaccine uptake and acceptance. The film featured two nurses, one a triage nurse with 20 years in the job, who each contracted hepatitis B and HIV after accidents at work. As a result of these efforts, the number of workers opposed to immunization has dropped from 46.5% to around 10%.

The campaign has demonstrated that receiving vaccinations at their place of work was a convenient method that also provided an opportunity to strengthen occupational health services for workers and improve procedures for managing the risks of exposure to bloodborne pathogens. The campaign also highlighted the importance of communication with stakeholders for bringing about behaviour changes to achieve the desired results.

Source: Mass vaccination of health workers in Peru *(41)*.

IEC campaigns may be organized around international days of significance to public health and decent work.[a] On such days, activities for informing, communicating and educating health workers and communities – such as talks, film shows, poster competitions etc. – may be organized on specific topics for health workers, the public and patients at all levels.

The national programme should also aim to build capacities to stimulate research on occupational health and safety for health workers and regularly to collect and review the results of this research to support policy improvement. Research on occupational health and safety for health workers can be strengthened by framing national research agendas and promoting practical and participatory research in accordance with local technology and available resources – including human and financial resources. Such research may focus on designing low-cost interventions

[a] For example: World TB Day: 24 March; World Health Day: 7 April; World Malaria Day, 25 April; World Immunization Week, 24–30 April; World Day for Safety and Health at Work: 28 April; World No Tobacco Day: 31 May; World Hepatitis Day: 28 July; World Patient Safety Day: 17 September; World AIDS Day: 1 December.

to protect health workers from hazards and action research to gather evidence on the interventions' effectiveness, sustainability and feasibility within the prevailing socioeconomic and technological conditions.

National scientific organizations associated with occupational health and safety, whether as separate institutes or as part of another institution, can serve as useful resources for carrying out research and provide training on occupational health and safety. Such institutions may also help in assessing the current situation and conducting special surveys and studies, thus serving as important sources of scientific data on occupational health and safety.

1.2. Financing

KEY DELIVERABLE:

Mechanisms for efficient and sustainable financing of measures for health and safety of health workers established.

At the national level, financing for protection of the health and safety of health workers may come from different sources – regular governmental budgets, local authorities, programme-specific funds, research funding mechanisms, insurance funds for occupational diseases and injuries, donor agencies, private funds etc. Box 8 describes the financing of national occupational health services in the health sector in Ghana. It is important to ensure coordination of different funding sources, pooling of funds and optimization of financial flows by merging certain line items. This is to avoid a situation whereby the same providers, such as occupational health services, are confronted with different financial incentives from different programmes. Some programme-related occupational health services – such as diagnosis, treatment and rehabilitation of occupational diseases and injuries – may be part of the common package of employment injury benefit schemes and social health protection. Specific financial mechanisms may be needed for:

- Capital investment for engineering controls for work improvements.
- Training and capacity-building for work improvement in health services.
- Procurement of PPE, safer medical devices, equipment and tools for safe work.
- Establishment of in-house occupational health services or contracting of such services from external providers.
- Procurement of vaccines and roll-out of vaccination plans for health workers.
- Funding of projects for improving occupational health and safety.
- Integration of funds for occupational health and safety into the funding for the supply side of health service delivery.

Ensuring sustainable financing is critical for the effective national programmes for occupational health and safety for health workers and for the continuity of protective measures. Donor funding should be only considered as a temporary option or for enabling specific projects to start.

Box 8. Financing of national occupational health services in the health sector in Ghana

The policy and guidelines for a National Occupational Health Plan in the health sector specifies that medical surveillance and rendering of medical care for injuries and diseases suffered by the worker should be at no cost to the worker. The cost should be borne by the employer through arrangements made in accordance with national conditions and practice.

The Ministry of Health ensures the availability of funding for occupational health via a combination of funds from the following sources: 1) the National Health Insurance Scheme to cover periodic medical examinations, medical care for ailments, rehabilitation and worker education; 2) an endowment fund set up for this purpose which will be drawn on to complement other sources for accident and injury coverage, sickness pay, death as a result of the workplace and other hazards, and to complement sources for terminal illness; 3) group insurance for workers; and 4) the Workers' Compensation Act. (The first three sources will complement the provisions of this law.)

Source: Occupational health and safety policy and guidelines for the health sector. Accra: Ministry of Health, Ghana; 2010 (https://www.moh.gov.gh/wp-content/uploads/2016/02/Occupational-Health-Safety-Policy-Guidelines-for-Health-Sector.pdf, accessed 14 December 2021).

Because of the range of occupational hazards in the health sector, it is imperative that all health workers are provided with adequate financial compensation for the loss of income and the cost of treatment in the case of occupational injuries, diseases and fatalities in line with the prevailing national or subnational regulations for compensation of occupational diseases and injuries.

The ILO Employment Injuries Benefits Convention, 1964 (No. 121), covers the range of workplace injuries and health morbidities as well as the eligibility of workers and their survivors for benefits *(42)*. The Convention provides for medical care and allied benefits in respect of a morbid condition, and cash benefits in respect of specified contingencies.

The ILO List of Occupational Diseases Recommendation, 2002 (No. 194), and the list of occupational diseases (revised in 2010), annexed to the Recommendation, give guidance to countries in designing their own national lists of occupational diseases, and also in prevention, recording, notification and, when applicable, compensation for diseases caused by workplace exposures *(43)*. The national lists of occupational diseases should include specific diseases and disorders faced by health workers – e.g. occupational infections (HIV/AIDS, hepatitis B and C, TB, and other emerging infectious diseases), latex and drug allergies, occupational musculoskeletal disorders, post-traumatic stress disorder, the effects of radiation and exposure to toxic drugs etc.

Social protection for sickness absence and for health care is important for maintaining the health and safety of health workers *(42,44–46)*. Pregnant and nursing health workers require effective maternity protection, including protection against employment termination or loss of earnings during maternity leave, as well as access to quality maternal health care and services *(46–48)*.

Financing for occupational health and safety is interlinked with investment in the readiness, education and training of health workers themselves. Accidents, injuries and negative health impacts on health workers are often associated with inadequate quantities, distribution and management of the health workers themselves, as well as extended working hours, long periods of overtime and other decent work deficits.

1.3. Human and physical resources

KEY DELIVERABLES:

- **Adequate human resources for occupational health and safety for health workers in sufficient numbers, with technical knowledge and skills available at all levels of health systems.**

- **Adequate supplies and commodities including PPE, vaccines, safe medical devices, tools and equipment for safe work readily available at all levels of the health system.**

Protection of health and safety of health workers requires building human and physical resources for occupational health and safety at all levels of the health system and in all health facilities.

All health workers need to have basic knowledge and skills to protect their health and safety. This goal can be achieved, for instance, by including occupational health and safety of health workers as part of their pre-service training, so that they enter the labour market equipped with basic knowledge and skills to protect themselves.

Specific knowledge and skills are needed for health workers in charge of occupational health and safety in health facilities – focal points for occupational health and safety for health workers and members of the committee for health and safety at work.

There is also a need to build human resource capacities for occupational health and safety for health workers at the subnational and national levels by training and specialization in occupational health, which would include the specific occupational health hazards and their controls in the health sector. This will allow occupational

health practitioners to provide specialized occupational health services to health facilities.

The national programme may include the following elements for building human resource capacities for protecting the health and safety of health workers:

- Introduce occupational health and safety into the pre-service training of health care providers.
- Define the essential competencies of focal points for occupational health and safety for health workers and members of joint labour-management committees for health and safety.
- Establish centres of excellence and technical advisory services for occupational health and safety for health workers at the national and subnational levels (e.g. based in a national institute or tertiary hospital).
- Develop curricula, training materials, e-learning tools and communities of practice to build and maintain essential competencies for the facility focal points for occupational health and safety for health workers.
- Develop standards for identifying staffing needs for planning of human resources needed for occupational health and safety in the different types and levels of health facilities.
- Provide incentives for research and post-graduate training in occupational health and safety for health workers.
- Create mechanisms to monitor training needs at all levels and for regular delivery of training courses and continuous medical education in occupational health and safety for health workers.

Competency-based "training of trainers" programmes should be organized for the core training team at national and subnational levels, as appropriate. The core training team will be responsible for providing training to focal points for occupational health and safety at facility levels. This should include standard precautions and workplace practices during outbreaks and emergencies.

In addition to campaigns, education and training opportunities should be presented to employers and workers in a blended learning environment that includes standardized in-person training and digital self-guided or presented learning, including post-course accreditation based on demonstrated acquisition of competencies. Professional associations and medical education institutions can be a rich source of both training and trainers. Global resources for online training are available from WHO through OpenWHO and the WHO Academy in multiple languages and can be used to substitute for or supplement training at national level (Box 9).

Box 9. Online training courses for health workers

The OpenWHO course *Occupational Health and Safety of Health Workers in COVID-19* is a free online course that takes about an hour to complete. The course covers infectious, physical and psychosocial risks for health workers and the provision of basic occupational health and safety in delivery of health services. The objective of the course is to build knowledge and skills among health workers so that they can better protect themselves and others from the occupational risks they encounter, and so that they can work safely and effectively. (See: https://openwho.org/courses/COVID-19-occupational-health-and-safety, accessed 11 October 2021).

The WHO Academy has a special section on IPC and occupational health with several online courses, including augmented reality training on the use of PPE (https://www.who.int/about/who-academy, accessed 08 November 2021).

The WHO rapid response training package also includes a module on occupational health tailored to the specific needs of rapid response teams (https://extranet.who.int/hslp/training/enrol/index.php?id=327, accessed 11 October 2021).

The OSHAcademy of the United States of America also provides a number of general and specific courses on occupational health and safety for health workers (https://www.oshatrain.org/pages/hospital_safety.html, accessed 11 October 2021).

Depending on the procurement system of health systems and health facilities, it may be efficient to organize central procurement of certain commodities for protection of health and safety of health workers against most common occupational hazards in the health sector. Such commodities could include vaccines, PPE, assistive patient handling equipment, safe needle devices, security equipment to reduce workplace violence (surveillance cameras and panic buttons), water cooler dispensers (for heat stress), hand hygiene stations and others. A central procurement could ensure that the devices are adequate, efficient and at reasonable cost.

1.4. Service delivery

KEY DELIVERABLES:

- Standards for provision of occupational health services for health workers available, along with a system of quality assurance and a programme for service expansion.

- Policies for the provision of HIV, TB and hepatitis B and C services for health workers established.

Occupational health services for health workers are units or clinics providing specialized services to health facilities and workers for the prevention of ill-health caused or exacerbated by work. Such services aim primarily at the prevention of occupational accidents, diseases and injuries and include risk assessment, timely intervention, rehabilitation, medical assessments for work, the promotion of health and well-being and training (see Box 10) *(49)*. To be effective, the service should have multidisciplinary teams with specialized training and experience in occupational medicine, occupational hygiene, occupational health nursing, ergonomics, organizational and clinical psychology and other relevant fields according to the nature of duties to be performed. Occupational health services for health workers should have experience, knowledge and equipment to address the specific health needs of health workers, the protection of health and safety in health-care settings and the provision of health services.

Box 10. Essential functions of occupational health services

The ILO Occupational Health Services Convention, 1985 (No. 161), and the accompanying Occupational Health Services Recommendation (No. 171) provide a comprehensive approach to the development of occupational health services for all workers, including those in public services *(29,50)*. The essential functions of a comprehensive occupational health service for health workers would include:

1. Occupational health risk assessments to identify occupational hazards, associated health risks, and the availability and effectiveness of prevention and control measures.
2. Medical surveillance of health workers, based on the occupational health risks associated with their specific jobs and workplaces, including medical examinations and tests as appropriate before and after change in the assignment to workplaces and job tasks, periodic physical and mental health assessment, return to work after prolonged sickness absence and upon termination of employment.

3. Surveillance of the factors in the working environment and working practices that may affect workers' health, including sanitary installations, canteens and housing where these facilities are provided by the employer.
4. Advice on planning and organization of work, including the design of workplaces, on the choice, maintenance and condition of machinery and other equipment and on substances used in work.
5. Participate in the selection of adequate PPE, organize fit-testing (if required) and provide training of workers on 'donning and doffing' of PPE.
6. Early diagnosis, notification, treatment and rehabilitation of occupational injuries and diseases, including support for submission of compensation claims as appropriate.
7. Emergency preparedness, first aid services and provision of post-exposure prophylaxis for HIV and hepatitis B virus.
8. Immunizations of health workers according to their risk of exposure to pathogens of vaccine-preventable diseases and the recommendations of national vaccination programmes.
9. Campaigns among health workers for raising awareness and increasing the uptake of preventive interventions (e.g. for vaccination, prevention of violence and harassment, promotion of mental health, safe patient handling, prevention of injuries).
10. Provision of guidance on rehabilitation to help health workers stay at work or return to work early after illness.
11. Organization of the protection of vulnerable workers, such as those with chronic diseases, mental health conditions and disabilities, as well as addressing the specific health needs of female workers.
12. Organization and provision, as appropriate, of services for mental health and psychosocial support and follow-up, and support to victims of workplace violence and harassment.
13. Training of health workers and the members of health and safety committees in general work improvement in health care facilities and in prevention of specific occupational health risks.
14. Organization of health promotion activities for addressing common behavioural risk factors, such as tobacco smoking and substance abuse, lack of physical activity, unhealthy diet etc.
15. Data collection and record-keeping, including individual health records, vaccination records, reports of accidental exposures and incidents and training records.

The establishment of occupational health services should be provided for by laws or regulations, by collective agreements or in any other manner approved by the competent authority after consultation with the representative organisations of workers and employers.

Sources:

Occupational Health Services Convention, 1985 (No. 161) (https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C161, accessed 28 October 2021)

Occupational Health Services Recommendation, 1985 (No. 171) (https://www.ilo.org/dyn/normlex/en/f?p=1000:12100:0::NO:12100:P12100_INSTRUMENT_ID:312509, accessed 15 July 2021).

Occupational health services may be organized as a unit within a single health facility (e.g. a large tertiary hospital), or as a service shared by a group of health facilities as appropriate, or as an external service. The choice may be based on available resources in terms of finances, facilities and qualified personnel.

The national occupational health and safety programme for health workers should specify the minimum standards for provision of occupational health services for health workers and the system for their quality assurance according to national requirements (see the example from Paraguay in Box 11). The programme should also set a strategy for expanding the coverage of occupational health services for health workers according to the local context.

The provision of occupational health services is without prejudice of employer's responsibility for the occupational health and safety for health workers and with due regard to workers' responsibility to participate in occupational health and safety measures. Occupational health and safety measures shall not involve any cost for the workers. The benefit of these services to health workers and patients justifies this expenditure. The performance of occupational health services should be reviewed regularly.

Box 11. Occupational health services in health facilities in Paraguay

In 2019, the Ministry of Public Health and Social Wellbeing of Paraguay issued an executive order that requires health care facilities with 150 workers or more to establish occupational health services composed of experts in occupational medicine, hygiene, safety, psychology and ergonomics. The functions of occupational health services include:

1. Identify, evaluate and control work-related factors that may affect the health of workers, including biological, physical, chemical, ergonomic, psychosocial (work stress, burnout, poor work organization, violence and harassment) and safety risks.
2. Conduct entry, periodic and exit medical examinations in accordance with current legal requirements and keep updated occupational health records of workers.
3. Carry out surveillance, registration and notification to the competent authorities of the pathologies and absenteeism related to work.
4. Investigate work-related accidents and occupational diseases that have occurred, to determine the causes and to implement the necessary corrective measures.
5. Receive, prepare and update the morbidity and mortality statistics of workers.
6. Advise and coordinate with different units of the institution, the activities in the field of health promotion and preventive medicine.

7. Ensure availability of a physical space for the provision of first aid and medical and recovery services equipped with medical and nursing staff, social service workers, equipment and necessary supplies.
8. Ensure availability of signposted and conveniently located emergency kits for the provision of first aid; a detailed list of the addresses and telephone numbers of the emergency units to which the injured or sick worker can be transferred; and a system for transferring sick or injured workers to a health service where they will continue their medical or rehabilitation treatment.
9. Promote safe behaviours and train workers on occupational hazards, the prevention and control of occupational risks, health promotion and disease prevention, and give training on the general provisions of safety, hygiene and occupational medicine.
10. Promote and coordinate physical, recreational and cultural activities aimed at the workers of the institution.
11. Compile and keep up-to-date statistics on work-related accidents, diseases and absenteeism related to occupational risks.
12. In cases of reduced working capacity of the worker, collaborate and coordinate activities with competent agencies in professional rehabilitation.
13. Recommend, monitor and supervise the use of personal protective equipment for the prevention of risks associated with occupational hazards in health-care settings.
14. Recommend the installation of a physical space for the preparation and consumption of food and provision of fresh drinking water for workers.
15. Develop other related activities, in accordance with current regulations.

Source: Resolución SG No 486. Asunción: Government of Paraguay; 2019 (http://portal.mspbs.gov.py/mecip/wp-content/uploads/2012/03/RESOLUCION-SG.-N%C2%B0-486-19-Programa-de-Salud-Ocupacional.pdf, accessed 11 October 2021).

Occupational infections such as HIV/AIDS, TB, hepatitis B and C, and COVID-19 create major strains on the health workforce worldwide, particularly in low- and middle-income countries. While health workers are at the frontline in providing care, they may need adequate access to targeted health services for these infections. Box 12 provides key recommendations for providing HIV and TB services to health workers.

Box 12. WHO/ILO/UNAIDS guidelines for access of health workers to HIV and TB services

WHO/ILO/Joint UN Programme on HIV/AIDS (UNAIDS) policy guidelines provide specific recommendations on improving health worker access to prevention, treatment and care services for HIV and TB, stressing the importance of *(51)*:

1. Promoting priority access for health workers.
2. Implementing supportive policies and strengthening infrastructure.
3. Providing training and codes of practice.
4. Allocating funds for programmes, materials and medications.
5. Establishing schemes for reasonable accommodation and compensation, including, as appropriate, paid leave, early retirement benefits and death benefits in the event of occupationally acquired disease.
6. Monitoring of structure, process and outcome with multistakeholder involvement from national to facility level.

Source: Joint WHO/ILO/UNAIDS guidelines on improving health worker access to prevention treatment and care services for HIV and TB (https://www.who.int/publications/i/item/9789241500692, accessed 08 June 2021) *(51)*.

CHAPTER 2.

SUBNATIONAL OR DISTRICT PROGRAMMES

In some countries, provincial and district health teams have a key role in protecting the health and safety of health workers and, in some jurisdictions, they may hold the main role. Such teams operate in clearly defined administrative areas where local government and administrative structures carry some of the responsibilities of the national government and where there is a general hospital for referral *(34)*.

Consequently, it may be appropriate to establish subnational programmes for occupational health and safety for health workers, adapting the elements of the national programme to the local context while keeping them in line with national legislation, regulations, and policies. Provincial, regional or district health management teams can serve as a bridge between individual health facilities and the national level, organizing activities, carrying out capacity-building and data collection, and providing technical assistance and other functions as appropriate. An example of occupational health policy for a district network of health care facilities in Australia is presented in Box 13.

Box 13. Subnational occupational health policy for a district network of health care facilities in Australia

The Western Australia Country Health Service (WACHS) published an occupational health and safety policy to ensure that it meets the legislated obligation under the Occupational Safety and Health Act 1984 to provide a safe place for its employees. The policy states WACHS' commitment to comply with, or exceed, legal requirements for occupational health, to encourage the election of safety committees, to provide current and relevant health and safety information in the health care environment and to apply a consultative approach in safety reporting and investigation. The policy also outlines the roles and responsibilities of WACHS as the employer, and the responsibilities of regional coordinators, health and safety committees and representatives, employees, line managers, senior managers and executive leads.

Source: Occupational Safety and Health Policy. Perth: Government of Western Australia Country Health Service; 2021 (https://www.wacountry.health.wa.gov.au/~/media/WACHS/Documents/About-us/Policies/Occupational-Safety-and-Health-Policy.pdf, accessed 11 October 2021).

The provincial or district health management team may decide to appoint a health officer with training in occupational health and safety to supervise and guide the management of occupational health and safety in the health facilities located in the administrative area, in collaboration with provincial or district authorities and specialized agencies, local workers' and employers' representatives in the health sector and other local stakeholders.

The function of the provincial or district health officer for occupational health and safety for health workers could include:

- To liaise, coordinate and collaborate with the national unit responsible for occupational health and safety for health workers.
- To oversee the establishment and functioning of the joint labour–management committee for health and safety at work in health facilities.
- To oversee the designation and functioning of the focal points for occupational health and safety for health workers in all health facilities.
- To carry out audits of occupational health and safety in health facilities.
- To provide technical support to health facilities to ensure compliance with occupational health and safety regulations and relevant national guidelines and standard operating procedures, and liaise as appropriate with the authority responsible for enforcement of occupational health and safety regulations.
- To collaborate with other departments, local authorities and stakeholders – such as trade unions and professional associations of health workers – and employers in the health sector – such as hospital federations – to promote the occupational health, safety and well-being of health workers.
- To advise and, where appropriate, oversee the integration of measures for occupational health, safety and well-being in the building design, construction and reconstruction of health facilities.
- To identify training needs for human resource development in occupational health and safety.
- To plan and allocate resources for implementation of occupational health and safety measures.
- To monitor and evaluate the implementation of occupational health and safety programmes for health workers in health facilities.
- To organize local campaigns for promoting healthy behaviours and safe practices among health workers.
- To work with the managers of health facilities to promote a preventative culture and to encourage the reporting and investigation of occupational health and safety incidents, occupational diseases and injuries.
- To collaborate with community leaders to promote the occupational health and safety of health workers in the community, including community health workers and traditional healers.

It may also be necessary to establish indicators and to monitor the implementation of the provincial or district occupational health and safety programme. These should

be in line with the indicators established at the national level and compatible with the national health information system. Box 14 provides an example of indicators for monitoring at the district level in Zanzibar.

Box 14. Indicators for monitoring at district level in Zanzibar, United Republic of Tanzania

The Zanzibar national policy guidelines for occupational health, safety and well-being in the health system define the following indicators for annual monitoring at the district level *(40)*:

- number of health facility inspections covering occupational health and safety;
- number of training courses on occupational health and safety for health facilities (focal points and committee members);
- number of health workers trained in occupational health and safety;
- funds spent on occupational health and safety (human resources, training, safety equipment, PPE, information materials etc.);
- number of health facilities with appointed focal points for occupational health, safety and well-being;
- number of health facilities with more than 10 permanent employees with an established joint labour–management committee for occupational health, safety and well-being.

Source: The Zanzibar policy guidelines for occupational health, safety and wellbeing of workers in the health system. Ref: *(40)*.

CHAPTER 3.

HEALTH FACILITY PROGRAMMES

Occupational health and safety programmes at the facility level should be adapted to the specific context and risks in the individual settings, in line with national legislation, policies and subnational programmes. Such facility programmes should be based on establishing an occupational health and safety management system that envisages continuous improvement of working conditions for workers in health facilities and other persons under the control of the health facilities, such as subcontractors, volunteers, trainees and community health workers.

The basic principles for facility programmes for occupational health include:

- Developing a preventive health and safety culture in all health facilities.
- Being proactive rather than reactive.
- Assessing occupational risks and controlling them at the source rather than managing their effects.
- Promoting active consultation and participation of workers and workers' representatives and interested parties.

Occupational health and safety programmes in health facilities may include the following key elements:

- A facility occupational health and safety policy.
- A facility focal point for occupational health and safety for health workers.
- A joint labour–management committee for health and safety at work.
- Information, education and training.
- Assessment and mitigation of occupational hazards.
- Immunization of health workers.
- Recording, investigation and reporting of incidents.
- Early detection, diagnosis, treatment, care, notification and support for occupational diseases and injuries.
- Monitoring and evaluation.
- Environmental hygiene and sustainability.

3.1. Facility policy on occupational health and safety.

KEY DELIVERABLE:

A written facility policy on occupational health and safety available in all health facilities.

The most effective strategy for managing health and safety in health facilities as well as providing health services is to incorporate occupational health and safety into an institution's managerial objectives. Handling health and safety objectives in the same way as handing objectives for finances, services or quality will help attain a high performance standard in health and safety and may contribute to retaining health workers and increasing patient satisfaction and safety.

The basic components of a system for managing occupational health and safety are presented in Fig. 2. The management system includes developing a policy for occupational health and safety, good organization of occupational health and safety activities, careful planning and implementation, monitoring and evaluation and actions for continuous improvement of the system.

In line with the national policy, every health facility should develop its own occupational health and safety policy that is adapted to the size and type of the facility (Box 15). The facility occupational health and safety policy should be developed by the employer or his representative (e.g. facility manager), in consultation with workers and their representatives and other stakeholders, specifying:

- The duties and responsibilities for protection of occupational health and safety of health workers according to the national policy and regulations.
- The functions of the focal points for occupational health and safety for health workers.
- The establishment and role of the labour–management committee(s) for health and safety at work.
- Access to occupational health services staffed by adequately trained and credentialed occupational health professionals (with services that ensure confidentiality of personal health information).
- Specific programmes offered by the facility such as:
  - vaccinations;
  - medical surveillance of health workers;
  - mental health and psychosocial support;
  - prevention of violence and harassment; and
  - reporting of accidental exposure to pathogens and incidents of violence and harassment in a blame-free environment.

Figure 2. Management system for occupational safety and health

Source: ILO, 2001*(2)*.

The policy should be discussed with the workers and, when agreed, should be posted in a visible area of the facility. Information on the policy and arrangements in the field of occupational health and safety, and the various responsibilities exercised under these arrangements, should be brought to the notice of every worker, in a language or medium the worker readily understands. It should also regularly be evaluated to ensure that it is duly updated.

Box 15. Facility policy on occupational health and safety for health workers in New Zealand

To ensure a healthy and safe working environment and culture for all employees, patients, contractors, students, volunteers and visitors, a tertiary-level surgical hospital in New Zealand developed a health and safety policy. The policy document includes clear objectives, an implementation plan and the responsibilities of different actors, including hospital management, employees, contractors, students and visitors.

Source: Health and Safety Policy. Dunedin Mercy Hospital (https://www.mercyhospital.org.nz/assets/Policies/HealthandSafetyPolicy.pdf) Ref: *(52)*.

3.2. Facility focal point for occupational health and safety

KEY DELIVERABLE:

Focal points for occupational health and safety for health workers designated and trained in all health facilities.

Managers of health facilities should designate a focal point for occupational health and safety for health workers and determine his or her functions according to the facility's policy and in collaboration with the IPC and patient safety focal points. Facility focal points for occupational health and safety should carry out their professional mandates in accordance with their professional code of ethics and should be independent in their decision-making.

In smaller health facilities the focal points for occupational health and safety for health workers may be a person tasked with occupational health and safety duties and whose functions could be combined with other similar functions (e.g. quality of care, patient safety, IPC, environmental health). In larger health facilities, for this function, an internal occupational health service may be established comprising several multidisciplinary service components.

Where resources do not allow for an adequately trained and credentialed occupational health professional at the facility level, the minimum training for the focal point for occupational health and safety for health workers should at least be the complete Work Improvement in Health Services (HealthWISE) training *(53)* or other equivalent training programme as necessary. In such cases, it would be useful for the facility focal point to have technical support of a credentialed occupational health practitioner at the district or provincial level, as far as practically feasible. The core competencies of the facility focal points for occupational health and safety are listed in Box 16.

Box 16. Core competencies of facility focal points for occupational health and safety

Given the intricacy of their tasks, the focal points for occupational health and safety should preferably have medical or nursing backgrounds with multidisciplinary skills. Core competencies could include:

- recognition of potential hazards in the work environment, evaluation of risks and provision of advice and information on control measures;
- taking and analysing clinical and occupational history, including an exposure history in a relevant, succinct and systematic manner;
- ability to communicate effectively, both orally and in writing, to patients and other stakeholders in a manner that they understand;
- assessing and advising on impairment, disability and fitness for work;
- being well informed about laws, regulations, codes of practice and guidance relevant to the workplace setting;
- understand the content and process of the delivery of health services;
- understanding how a team works effectively;
- understanding the relationship between health workers, safety and quality of care, patient safety, including IPC;
- ability to understand the principles and practice of management, project planning and evaluation;
- assessing needs for promoting healthier behaviours.

Adapted from: Lalloo, D, Demou E, Kiran S, Gaffney M, Stevenson M, Macdonald EB. Core competencies for UK occupational health nurses: a Delphi study. Occupational Medicine. 2016;66(8):649–55. https://doi.org/10.1093/occmed/kqw089.

The tasks of the facility focal points for occupational health and safety may consist of the following:

- Develop, in close consultation with management and workers, internal rules, policies and standard operating procedures for occupational health and safety in the health facility and, once adopted, make sure they are publicly displayed and that all workers are familiar with them.
- Propose the integration of measures for occupational health and safety in the overall management and the plans of action of the facility.
- Conduct occupational health and safety hazard identification and risk assessment.
- Assist the employer or facility manager in setting up a committee for health and safety at work for the health facility with representation from both management and workers, including their representatives.
- Where feasible, develop a risk-based medical surveillance programme, a fitness for work programme, occupational health and safety promotion, and context-specific IEC activities.

- Investigate reports of incidents, occupational diseases and work accidents by workers in a blame-free environment.
- Support the reporting, recording and notification of occupational injuries and diseases according to national regulations.
- Work with stakeholders in worker rehabilitation and accommodation where feasible.
- Work with and consult health workers and their representatives to identify concerns, requirements and solutions.
- Promote and monitor the implementation measures for prevention and control of occupational infections among health workers in line with the national or facility guidelines for IPC.
- Propose organization of work and procurement in a way that occupational health and safety for health workers is protected and promoted.
- Provide training on work improvement in health services to the members of the committee for health and safety at work, line managers and administrators.
- Promote a culture of prevention and a respectful workplace and promote safe work practices and healthy behaviours among workers.
- Support policies and measures for zero tolerance to workplace violence (any verbal and physical abuse, including sexual harassment) in the health facility and take measures to protect the safety and security of health workers.
- Prepare annual reports to the facility manager, the committee for health and safety at work and the respective subnational health management team on the measures taken to protect and promote occupational health and safety, as well as on incidents, occupational diseases and work accidents registered in the health facility.
- Develop plans for emergency procedures, contingencies and first aid.
- Participate in the procurement of PPE, safer medical devices and occupational health services.
- Cooperate with and assist the experts of occupational health services covering the facility.

3.3. Health and safety committee

KEY DELIVERABLES:

- Terms of reference, including structure, roles and composition of joint labour–management committees for health and safety at work developed.
- Members of the joint labour–management committees for health and safety at work identified and trained in the basic elements for workplace improvement in health services.
- The committee for health and safety at work meets regularly, and meetings are documented.

The ILO has identified that joint occupational safety and health (OSH) committees are the most effective forms for collaboration between employers and workers in terms of health and safety at work. A joint OSH committee is defined by ILO as "a bipartite body composed by workers' and employer's representatives, which is established at the workplace and is assigned to various functions intended to ensure cooperation between the employer and workers so as to achieve and maintain safe and healthy working conditions and environment." The appointment of workers' safety representatives or delegates in such committees is in accordance with the national practice and workers should have at least equal representation with employers' representatives *(54)*. The ILO publication *Joint OSH Committees* provides general guidance about the establishment, composition and functioning of such committees *(8)*.

In line with the national legislation, health facilities with more than a certain nationally-specified number of permanent employees may be required to establish a joint labour–management committee for occupational health and safety at work (health and safety committee). The committee may be composed of:

- The manager of the health facility or his/her representative.
- The focal points for occupational health and safety and other relevant facility functions, such as IPC and human resources.
- An expert from the occupational health service, if available.
- Workers' representatives designated according to national occupational health and safety legislation.

The health and safety committee should aim to achieve a gender balance with fair representation of health workers from clinical and auxiliary functions and reflecting the diversity of staff (e.g. social minority groups such as migrant workers and people with disabilities). The composition of the committee and the frequency of its meetings should be specified in the facility's occupational health and safety policy. The meetings of the committee should be documented and presented to the facility manager for executive action.

The committee should be involved in the development of the facility's occupational health and safety policy, lead its implementation, and discuss any incidents, cases of occupational diseases and injuries, and the complaints of workers on matters of occupational health and safety, and should also propose action to the facility manager (See the example from the Philippines in Box 17).

Box 17. Joint labour-management committees on occupational health in the health sector in the Philippines

The guidelines governing the occupational health and safety of public health workers approved by the Ministry of Health of the Philippines define the duties and functions of the joint labour-management committees on occupational health in health facilities. The guidelines state that, in each health facility, the joint labour-management committee should:

1. plan and develop occupational health and safety (OHS) programmes for the health care facility;
2. direct OHS efforts of the health care facility in accordance with government regulations to prevent diseases and injuries in the workplace;
3. conduct OHS meetings at least once a month;
4. review reports of inspection, accident investigations, disease outbreaks and implementation of the OHS programme;
5. submit reports on its meetings and activities to the head of the health care facility;
6. provide necessary assistance to inspecting authorities in the proper conduct of their activities, such as the enforcement of the provisions of this Order;
7. initiate and supervise OHS training of health care workers; and
8. develop and maintain contingency plans and organize emergency service units as may be necessary to handle such situations.

Source: Guidelines governing the occupational health and safety of public health workers. Republic of the Philippines Department of Health. 2012 (https://dmas.doh.gov.ph:8083/Rest/GetFile?id=336909, accessed 2 December 2021) *(55)*.

3.4. Training, safety briefings and risk communication

KEY DELIVERABLES:

- All focal points for occupational health and safety in health facilities and members of the health and safety committee trained and certified according to the core competencies.

- Regular training programme and safety briefing plan for all health workers and specific target groups designed, planned and implemented.

In order to ensure a healthy and safe working environment, the employer has the responsibility to provide regular occupational health and safety training and briefings at all levels, including to line managers, health workers, facility support, subcontractors, and community health workers under the control of the health facility. Periodic needs assessments should be conducted to guide the training programme and to ensure that all training needs regarding the specific occupational hazards in the health care facility and the measures for their prevention and control have been identified and handled.

The focal points for occupational health and safety at facility level will be responsible for training the health and safety committees, line managers and administrators. Alternatively, this training may be provided by a competent external provider, as necessary. Health and safety committees need to understand their roles and responsibilities under the law; they should be trained to identify hazards and hazard control, and how to access data and supportive information. Line managers and administrators should be familiar with the basics of workers' health and safety (e.g. risk assessment, control measures, incident investigation and reporting, communication, organizational and leadership skills etc.), with emphasis on the areas for which they are directly responsible. They must also learn why this area is important for patient care, and what are the legal responsibilities of the employer. Health workers must receive information and instructions on common occupational health and safety hazards in health care settings, as well as their risk and control measures, safety practices on how to do their jobs safely, the importance of incident reporting, pre-placement, periodic exit and return-to-work health examinations, and their rights and responsibilities under the law. Education must be provided regularly in order for workers to maintain, update and improve their skills and knowledge. All training materials must be derived from validated information accepted by experts at the national level (Box 18). OpenWHO and WHO Academy websites are other valuable

resources for training materials that can be used to substitute or supplement training (see Box 9).

The duration of the training will depend on the occupational health and safety experience of the trainees and the training objectives; however, a short course of 2–3 days may be enough, with post-training competency assessment and certification. This training should be integrated into the pre-placement orientation and should be provided regularly thereafter, including when a health worker is moved to a new role or work environment with different hazardous exposures.

Box 18. HealthWISE – an ILO/WHO international training tool for work improvement in health services

The ILO/WHO HealthWISE toolkit is a practical, participatory quality improvement tool that combines action and learning, encouraging managers and staff to work together to improve workplaces and practices. It focuses on achievements, and promotes the application of simple and low-cost solutions, learning by doing and information exchange.

The methodology assumes that health workers know best about their working conditions and usually have ideas on means of improvement.

The toolkit consists of two parts:

- an action manual for use at the facilities by the workers trained *(53)*; and
- a trainers' guide that provides guidance and resources for organizing and conducting HealthWISE training sessions. The toolkit is available in several languages, along with standard PowerPoint presentations for group training.

Source: ILO/WHO. HealthWISE Action Manual. Work improvement in health services. 2014 (https://www.ilo.org/global/docs/WCMS_237276/lang--en/index.htm, accessed 11 October 2021).

Many countries have used HealthWISE to build capacities for work improvement in the health sector. In China, for instance, the toolkit was translated into Chinese and officially published in 2016. Seven HealthWISE training-of-trainers workshops were organized before August 2020, covering 130 hospitals and more than 450 health professionals across the country's provinces. The training prioritized the HealthWISE modules dealing with general control of occupational hazards, musculoskeletal disorders, biological hazards and infection control, plus tackling discrimination, harassment and violence.

Source: Zhang M. Occupational health for health workers in China before and after COVID-19. International Commission on Occupational Health (ICOH) Newsletter. 2020;2:21–6 (http://www.icohweb.org/site/pdf-viewer/viewer.asp?newsletter=icoh_newsletter_vol18_no2.pdf, accessed 11 October 2021).

3.5. Assessment and mitigation of occupational hazards

KEY DELIVERABLES:

- Regular assessments of occupational hazards and the effectiveness of their controls regularly carried out and documented.
- Action plans for work improvement developed and implemented.

The essential purpose of the occupational health and safety programme is the primary prevention of occupational diseases and injuries. This requires regular assessment and mitigation of risks in the workplace – i.e. find and fix the hazards, the exposures and the effectiveness of their controls. This is often carried out with risk assessment tools, guidelines or checklists, which should be made available at all health facilities (Box 19). These tools will be used to conduct regular assessment of occupational health and safety risks and the effectiveness of the existing measures for their control.

The focal point for occupational health and safety for health workers and the health and safety committee should develop tools for conducting occupational health risk assessments as well as training other workers on how to use them.

In addition to the general risk assessment – through regular walk-through surveys to find and fix the hazards – there may be need for focused assessment of specific hazards and preventive measures, such as:

- Infection prevention and control.
- Patient handling.
- Violence and harassment.
- Psychosocial risks.
- Risk of injuries.
- Exposure to radiation and hazardous chemicals.

It is important to note that health workers may be at risk of incidents of violence and harassment on their way to and from work and in the community, as shown during the COVID-19 pandemic *(56).* Measures such as community engagement and communication initiatives may be adopted to prevent stigmatization of health workers, thereby promoting public respect and recognition of their role.

Box 19. Workplace risk assessment in health facilities

The European Agency for Safety and Health at Work has outlined the following steps for conducting the health risk assessment at the workplace *(57)*:

Step 1. Identifying hazards and those at risk – checklists, screening instruments or other tools can be used to obtain an overall impression of potential risks and hazards for each task performed. Well-known occupational risks and hazards in the health-care sector include biological, musculoskeletal, psychosocial and chemical risks.

Step 2. Evaluating and prioritizing risks – evaluate individual risks identified for the tasks performed and determine if measures must be taken. This depends on the probability and severity of potential health problems caused by the risk. If a risk is not acceptable, immediate measures must be taken; if a risk is acceptable for a short time, it can be addressed later.

Step 3. Deciding on preventive action – preventive measures follow a hierarchy. If possible, a risk should be avoided rather than being reduced (e.g. a dangerous chemical substance should be replaced by a less dangerous one). Additionally, the following hierarchy should be considered with regard to preventive measures:

- Technical measures: If possible, risks should be reduced with technical appliances, technical aids or construction measures.
- Organizational measures: A good work organization and written organizational agreements on working sequences can avoid or reduce risks.
- Personal/individual measures: Individual instructions, as well as training and – most importantly –retraining measures, are necessary for sustainable effects on workers' health and safety.

Step 4. Taking action – plan necessary improvements derived from the risk assessment specifying what should be done by whom and by when to eliminate or control the risks. It is important to establish a time schedule for action measures together with everyone involved.

Step 5. Documentation, monitoring and review – the measures implemented should be monitored and reviewed to ensure that they are effective and do not create additional risks (e.g. while the use of disinfectants protects workers from biological risks such as bacteria, it may increase the risk of skin problems, which means that additional measures such as appropriate skin protection will be necessary).

Source: Occupational health and safety risks in the healthcare sector: guide to prevention and good practice. European Union (https://op.europa.eu/en/publication-detail/-/publication/b29abb0a-f41e-4cb4-b787–4538ac5f0238, accessed 5 November 2021) *(57)*.

3.6. Immunization of health workers

KEY DELIVERABLES:

- The facility has a policy for the necessary vaccinations of health workers according to the national immunization policy and the specific occupational health hazards.

- Immunization against vaccine-preventable diseases is provided at no cost to the workers and it is ensured that all required doses of immunizations have been received by all workers at risk, including cleaners and waste handlers.

Health workers have an increased risk of exposure to infectious diseases that can be spread by contact with patients, their blood and other bodily fluids during the course of procedures required for appropriate care. Standard precautions such as hand-washing, standard hazardous waste disposal and the use of infection control practices form the core of prevention. In addition, there are effective vaccines to prevent several infectious diseases that are widely transmitted among health workers *(58)*. However, vaccinated workers still need to apply the standard and transmission-based precautions.

Among the vaccine-preventable diseases, hepatitis B and COVID-19 pose highest risk of infections among health workers. The risk of hepatitis B infection after a needle-stick injury is higher than that for HIV among susceptible health workers. Consequently, routine immunization against hepatitis B and other vaccine-preventable diseases is an effective prevention strategy. Any health worker who has direct care for patients or handles items contaminated with blood, including waste handlers and students training in health care, should be immunized at 0, 1 and 6 months *(59)*.

To assist countries to develop national policies for the vaccination of health workers, WHO advises that it is expected that health workers are fully vaccinated in accordance with the national vaccination schedule in use in their country. The WHO recommendations on vaccinations for health workers include hepatitis B, polio, diphtheria, measles, rubella, meningococcal, influenza, varicella, COVID-19 and cholera *(58,60,61)*. Introduction of other vaccines not included in the national immunization schedule should be based on a risk assessment targeting the health workers at high risk of contracting specific infections for which effective vaccines exist. Vaccination should be carried out in accordance with national law and/or practice and health workers should receive information on the benefits and drawbacks of vaccination and non-vaccination (Box 20). Vaccination must be free of charge.

The following measures can be taken at the facility level to increase vaccination coverage:

- Identify high-risk workers and develop a risk-based immunization schedule to be implemented at all levels of health facilities and covering all categories of workers.
- Provide and promote free on-site vaccination.
- Encourage participation by utilizing signed consent or declination forms; educate health workers about the occupational risks associated with vaccine-preventable diseases, the efficacy of vaccination and other preventive methods.
- Use reminders to ensure completion of the full doses of the vaccine and maintain the immunization records of workers at facilities as well as at subnational and national levels.
- Provide paid sick leave, as needed, for workers experiencing adverse events following immunization.
- Integrate immunization into pre-employment orientation.
- Demonstrate management commitment by providing communication messages, resources and incentives, and monitoring vaccine coverage regularly.

Box 20. Vaccination Week in the Americas

In 2002, health ministers in two countries proposed a coordinated international vaccination effort that has become Vaccination Week in the Americas. This initiative is an opportunity to celebrate the power of vaccines, to hold specific and targeted activities and to highlight the essential work done by national immunization programmes. The core mandate is to reach out and vaccinate populations with little or no access to vaccination and to raise public awareness and political and media attention for the sustained and ongoing work that is needed to ensure that people benefit from vaccination.

In 2019, Vaccination Week in the Americas was held from 23 to 28 April. Countries in the region reviewed their own priorities and determined what the focus for the week would be nationally. One country, Guatemala, specifically targeted health care workers as recipients of Tdap (tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis) vaccination and also raised awareness of other vaccine-preventable diseases that are important in terms of occupational health (e.g. hepatitis B, influenza, measles), and preventing spread within health facilities. Over 5000 doses of Tdap were delivered to health care workers during the week of events. In this example, the Ministry of Health recognized the importance of occupational health and the role that health care workers can play in ensuring patient safety by not transmitting vaccine-preventable diseases.

Source: Vaccination Week in the Americas (VWA). Washington (DC): Pan American Health Organization (https://www.paho.org/vwa/, accessed 11 October 2021).

3.7. Recording, investigation and notification of incidents

KEY DELIVERABLE:

The facility has standard operating procedures for reporting of incidents, such as incidental exposures to occupational hazards (e.g. needle-sticks, blood splashes and cases of violence) while eliminating barriers to reporting and providing a blame-free environment.

Reporting and recording of incidents of exposure to occupational hazards and subsequent investigation of the root cause, followed by application of appropriate preventive and/or control measures, are important for continuous improvement of the management of health and safety in health facilities. This requires an incident management programme, standard procedures for reporting, investigation, corrective action and follow-up of incidents – as well as a culture that encourages incident-reporting, eliminates the barriers to reporting and ensures a blame-free environment for reporting exposures and incidents by all health workers. The facility programme should specify what kinds of incidents affecting health workers should be reported (e.g. unprotected exposure to blood and body fluids, needle-sticks, accidental exposure to hazardous chemicals, toxic drugs and sources of radiation, acute poisonings and injuries). The ILO code of practice on recording and notification of occupational accidents and diseases provides specific guidance for setting up legal, administrative and practical frameworks for the recording of occupational accidents and diseases *(62)*.

Reasons to investigate a workplace accidental exposure or incident include:

- To find out the cause of incidents and to prevent similar incidents in the future.
- To fulfil legal requirements.
- To determine the cost of an incident.
- To comply with applicable regulations (e.g. occupational health and safety, criminal law etc.).
- To process workers' compensation claims if there is harm to the victim.

Measures for encouraging incident reporting could be:

- To have a clear step-by-step standard operating procedure for reporting incidents, explaining what happens from reporting to action.
- To have a standardized reporting process that is made simple and avoids bureaucracy.

- To use incident reporting forms that are simple to complete and easily accessible to all workers.
- To ensure that all reported incidents are appropriately investigated in a blame-free environment.
- To ensure corrective actions after investigation.
- To train all workers on the whole process of reporting, investigation and activating procedures for corrective actions.

Steps of incident reporting and management are:

- Report the incident to the designated person in the organization by the affected person or co-workers.
- Provide first aid and medical care to the injured and prevent further injuries or damage.
- Investigate the incident and collect data.
- Analyse the data and identify the root causes of the incident.
- Report the findings and recommendations to the management.

There should be appropriately trained persons, such as the focal point for occupational health and safety and the members of the health and safety committee, who are able to conduct an initial assessment and counselling and refer exposed workers for follow-up if needed. Incident reporting and management information should be developed. Health workers should know how to access the incident reporting and management system and receive regular training to familiarize themselves with the reporting process (see the example from Portugal in Box 21).

Should there be an incident with exposure to blood, workers should report exposures immediately so that they can be evaluated for the need for post-exposure prophylaxis. Reporting should be actively encouraged and rewarded as this provides important opportunities to draw lessons for further improving the prevention of incidents.

Box 21. National system for online notification of workplace violence against health workers in Portugal

The online notification system for incidents of violence against health professionals in the workplace can be found on the website of Portugal's Directorate-General for Health, in a section dedicated to the Observatory of Violence Against Health Professionals in the Workplace (Information Circular No. 15/DSPCS of 7 April 2006). All data in the notification system are anonymous.

The notification system collects general information in terms of gender, age, professional group and employment status of the victim, the place of the incident and the type of violence. The system also allows for provision of additional details of the violent incident: place, day of the week and time of the event; gender, age group, socio-professional characterization of the aggressor; consequences for the victim of violence and for the facility; support provided to the victim; measures taken by the institution; degree of satisfaction with the way the incident was handled; and an opinion on whether the type of violence referred to is typical or not in the institution where it occurred.

Source: National Incident Notification System. Lisbon: General Directorate of Health (https://www.dgs.pt/paginas-de-sistema/saude-de-a-a-z/violencia/notificacao-online.aspx, accessed 12 October 2021).

3.8. Early detection, diagnosis, treatment, care, notification and support for occupational diseases and injuries

KEY DELIVERABLE:

Services for early detection, diagnosis, treatment, care, notification and support for occupational diseases and injuries including occupational infections – such as HIV, hepatitis B and C, TB, COVID-19 – are provided at no cost to workers while maintaining confidentiality.

HIV, TB, COVID-19 and hepatitis B and C are some of the most common occupational infections in the health sector. However, although health workers are at the forefront in providing care, their access to services may be limited. It is important to ensure that health workers have access to early detection, diagnosis, treatment, care and support for occupational injuries and diseases, including HIV, TB, COVID-19 and hepatitis B and C, as this will not only improve the health and safety of health workers

but also their retention in the workforce. Box 22 provides an example of HIV and TB services for health workers in KwaZulu-Natal, South Africa. Diagnosis, treatment and rehabilitation for other occupational diseases and injuries should be provided in line with the national regulations.

Employers have the responsibility to notify the relevant authorities of all occupational diseases and injuries, and provide information to health workers concerning the notified cases. Moreover, health workers should have access to financial compensation in case of loss of earnings due to occupational injuries and diseases.

Box 22. HIV and TB services for health workers in hospitals in KwaZulu-Natal, South Africa

An operational cross-sectional study carried out in district hospitals in KwaZulu-Natal, South Africa, with specialized drug-resistant tuberculosis (TB) wards found that hospitals offered the following services:

- Pre-placement health screening of new employees: with health history, including previous TB, physical health examination, height, weight, glucose screening, urine tests, HIV counselling and testing, and screening for TB symptoms.
- Regular TB symptom screening: weight monitoring, symptoms, chest X-ray, and collection of sputum if symptomatic.
- Referral of health workers diagnosed with TB for treatment to the hospital's outpatient TB clinic, their local primary health care centre, the occupational health clinic or their private provider.
- Monthly reporting of cases of TB among staff to the district health and labour offices and tracking of cases
- HIV counselling and testing.
- HIV postexposure prophylaxis.
- Isoniazid preventive therapy to HIV-positive staff and reassignment to low TB risk areas.

Source: Tudor C, Van der Walt M, Hill MN, Farley JE, Occupational health policies and practices related to tuberculosis in health care workers in KwaZulu-Natal, South Africa *(63)*.

3.9. Information system and monitoring

KEY DELIVERABLE:

The facility has a set of indicators and a system for regular collection, tracking, analysing, reporting and acting upon disaggregated data to promote the health and safety of the health workers.

Health facilities need to have in place procedures for monitoring, measuring and recording their performance in occupational health and safety on a regular basis. The selection of performance indicators would depend on the size of the facility and the nature of the health services while being in line with national and subnational indicators on occupational health and safety for health workers to ensure comparability. Such indicators can be both qualitative and quantitative and should reflect the commitments and the objectives of the facility's policy on occupational health and safety and allow for monitoring progress in implementing the occupational health and safety programme. Active monitoring – including achievement of specific plans, key performance indicators, regular workplace risk assessment, health surveillance of workers and regulatory compliance – is necessary for having a proactive programme for occupational health that prevents occupational diseases and injuries. Reactive monitoring aims to identify, report on and investigate work-related diseases and injuries, aggregate sickness absence reports, and cases of accidental exposure to pathogens, events of workplace violence and deficiencies in health and safety performance and the rehabilitation of health workers. Box 23 provides examples of indicators for active and reactive monitoring from the United Republic of Tanzania.

Box 23. Indicators for monitoring health, safety and well-being of health workers at facility level in Zanzibar, United Republic of Tanzania

The national policy guidelines for health, safety and well-being of health workers require health facilities to report annually to the district health management teams on the following indicators:

- existence of facility joint labour–management committee for occupational health, safety and well-being, and number of meetings;
- number of preventive medical examinations of health workers;
- existence of facility focal point for occupational health and safety;
- number of walk-through surveys (i.e. risk assessments) carried out;
- funds spent on occupational health and safety (e.g. human resources, training, safety equipment, PPE, information materials etc.);
- number of reported incidents with blood exposure (i.e. blood splashes, needle-sticks and sharps injuries);
- number of reported incidents with violence (i.e. physical, verbal, sexual harassment);
- number of cases with sickness absence due to low back pain and days lost;
- number of reported work accidents;
- number of reported cases with suspected occupational diseases, such as TB, hepatitis B and C, cholera, and other occupationally-acquired infections, low back pain, latex allergies and other diseases according to the ILO list of occupational diseases from 2010; and
- number of cases with post-exposure prophylaxis (HIV and hepatitis B or C).

Source: The Zanzibar Policy Guidelines for Occupational Health, Safety and Wellbeing of Workers in the Health System. Ministry of Health of Zanzibar. 2018 (https://www.afro.who.int/sites/default/files/2021-08/Zanzibar_Policy_Guidelines_web_ready.pdf, accessed 25 October 2021) *(40)*.

It is also important to have procedures and capacities for collecting information on all cases of work-related diseases, injuries and incidents and their impact on health and safety performance.

3.10. Environmental hygiene, sustainability and resilience

KEY DELIVERABLES:

- Adequate water, sanitation and hygiene (WASH) provision in health facilities.
- Facilities available for staff welfare (e.g. personal hygiene, clothing, rest and dining).
- Safe handling and management of health-care waste.
- Safety protocols available for use of hazardous chemicals.
- Standard operating procedures for action in extreme weather events (e.g. heat or cold wave, hurricanes, flood) include protection of health and safety of health workers and first responders.

Availability of safe drinking water and basic sanitation is the most important element of environmental health management at the health facility. The availability of water is crucial for implementation of IPC activities and environmental cleaning required for occupational health and safety protection of health workers and safe service delivery. WHO guidance on environmental health management in health facilities *(64)* stresses the need for:

- Safe drinking-water from a protected groundwater source or a treated supply.
- Water for hand-washing.
- Basic sanitation facilities that do not contaminate the health care setting or water supplies.
- Cleaning facilities to routinely clean surfaces and fittings.
- Control of disease vectors.
- Safe movement of air into buildings to ensure that indoor air is healthy and safe.
- Information about, and implementation of, hygiene promotion.

Health care waste is considered hazardous material and may be infectious, toxic or radioactive (Box 24). Health facilities should have a programme in place for safe health care waste management, including protection of the health and safety of workers in line with the WHO guidance document *Safe management of health-care wastes from health-care activities (65).*

Health facilities should also have in place measures for the safe management of hazardous chemicals and drugs. These measures would include:

- Engineering controls (e.g. closed automatic cleaning, disinfection or sterilization machines, local exhaust ventilation systems, safety cabinets etc.).
- Administrative and organizational measures (e.g. restricted access to hazardous work areas, limiting time of exposure, job rotation, prohibition of food and beverage intake in the workplace with potential exposure to dangerous substances, training of workers in the safe use of chemicals and first aid, availability of chemical safety data sheets).
- Personal protective measures (e.g. selection and appropriate use of adequate PPE, facilities for first aid and decontamination in case of accidental exposure, health surveillance of workers at risk of exposure).

Box 24. Safe management of hazardous chemicals in health facilities in Malaysia

The guidelines on safe management of hazardous chemicals in health facilities in Malaysia cover the following areas related to chemical management:

- Potential adverse health effects of chemical exposure.
- Existing laws pertaining to the handling of hazardous chemicals.
- Safe and healthy work practices among personnel during chemical handling, transportation, storage and disposal of hazardous chemicals.

Source: Guidelines on chemical management in health care facilities. Ministry of Health of Malaysia. Ref: *(66)* . 2010 (https://www.moh.gov.my/moh/images/gallery/Garispanduan/Guidelines_on_Chemical-1.pdf, accessed 15 July 2021).

Environmentally sustainable health facilities improve, maintain or restore health while minimizing negative impacts on the environment and leveraging opportunities to restore and improve it. The *WHO guidance for climate resilient and environmentally sustainable health care facilities (33)* lists interventions for protection of health and safety of health workers in the context of building resilience to climate-related disasters and emergencies, such as:

- Assessment of potential workplace hazards and planning of mitigation measures.
- Ensuring the availability of sustainable water, sanitation and environmental, chemical and health-care waste management services.
- Determination of safe staffing levels, with rostering and credential systems for ensuring operational sufficiency.
- Post-disaster employee recovery assistance programmes and psychosocial support.

- An early warning system and risk reduction plan to respond to climate-related emergencies.
- Prevention and management of heat strain and heat-related illnesses.
- A contingency plan for safe and secure evacuation during or following an extreme event.
- Security measures for safe and secure evacuation of staff and patients.
- Training of staff in protecting their health and safety during an emergency.

PART 2.

PROGRAMME DEVELOPMENT AND IMPLEMENTATION

This part provides guidance on the development and implementation of occupational health and safety programmes for health workers at all levels – national, subnational and facility – on the basis of the experience of countries.

At the national and subnational levels, ministries of health or district health teams may need to consult and work together with other relevant national and local government agencies – such as those responsible for labour and employment, social security and social protection – with the participation of representatives of employers' and workers' organizations, and in consultation with other stakeholders in the public and the private sectors, such as professional associations of health workers and patient groups. The length of the process for developing occupational health and safety programmes for health workers depends on the level of political ambition, the complexities of the national and district health systems, the availability of technical capacities in occupational health, and consensus among stakeholders.

At the facility level, the development and the implementation of the occupational health programmes requires continuous improvement process and regular dialogue between employers, workers and their representatives and involvement of other stakeholders in the health facility and in the community,

This section provides information on the process of developing occupational health and safety programmes based on the experience of countries.

CHAPTER 4.

PROGRAMME DEVELOPMENT

Based on the experience of countries the programme development process may involve the following steps:

STEP 1: Build political commitment for developing the programme.

STEP 2: Assess the current situation and establish a baseline.

STEP 3: Establish a task force, identify the most influential stakeholders and ensure engagement.

STEP 4: Write the first draft of the programme.

STEP 5: Carry out a feasibility assessment.

STEP 6: Discuss the first draft at a meeting with key internal and external stakeholders.

STEP 7: Develop a second draft and invite all stakeholders to comment.

STEP 8: Finalize, obtain approval, publish and disseminate.

It is noteworthy to consider that the development of occupational health and safety programmes for health workers is a dynamic, iterative and complex process. Consequently, some of these steps may occur simultaneously, be repeated, or carried out in a different order or at different times depending on the local circumstances.

STEP 1: Build political commitment

Political commitment is the decision of leaders to use their power, influence and personal involvement to ensure that the actions on protecting health, safety and well-being of health workers receive the visibility, leadership, resources and ongoing political support for improving working conditions in the health sector. This commitment is often underscored by an accurate understanding of the crisis dimensions of the lack of decent working conditions for health workers.

Political commitment in the broadest sense means leadership commitment. Leadership includes political and government leaders and managers, including ministers, permanent secretaries, programme managers, district leaders, traditional leaders, facility managers etc. It also includes the leaders of hospital federations in the private sector, presidents of employers' and workers' organizations in the health sector, professional associations of health workers, and civil and community leaders at all levels of society, as well as many others (Boxes 25 and 26).

Political commitment can be reflected through the following:

- A policy statement from the highest state of authority. At the national level this may be issued by the leader of the health system, such as the minister of health, while at the facility level it may be done by the facility manager or the corporate executive officer of the local network of health facilities. This may also be done through endorsement of a charter of care services to be provided.
- Specifying the budgetary allocation on occupational health and safety for health workers.
- Devoting a proportion of total health financial resources to occupational health and safety for health workers within the budget of the health sector, the local facility network or individual facilities.
- Commitment to ratify and apply relevant international labour standards.

The following strategies for building political commitment may be considered according to the local context:

- Create awareness and demonstrate the clear benefits of occupational health and safety programmes for health workers – such as reduced risk of occupational injuries, diseases and fatalities, improved quality of care and workers' morale, fulfilment of statutory requirements, duty of care and moral responsibility of the employer, increased productivity, and reduction of the direct and indirect costs associated with occupational injuries and diseases. This may involve creating or making use of international campaigns such as the World Patent Safety Day[b] or the International Year of Health and Care Workers[c] to raise public awareness on these issues.

[b] See https://www.who.int/campaigns/world-patient-safety-day/2020/campaign-materials.

[c] See https://www.who.int/campaigns/annual-theme/year-of-health-and-care-workers-2021/campaign-materials.

- Seek close collaboration with key actors and stakeholders both within and outside the health sector – such as the health workforce, quality of care, patient safety, trade unions, professional associations of health workers, civil society groups and community leaders.
- Build the business case and demonstrate the added value of the programme for different stakeholders:
  - For leaders of health workers' trade unions and professional associations, the implementation of the occupational health and safety programme for health workers contributes to decent work and effective respect for labour rights in the health sector, reduces suffering from work-related injuries and diseases, and hence improves workers' health and gives better access of their members to protective services such as occupational health services, immunizations and psychosocial support. This also increases the trust of health workers in the power of their leaders to make a change.
  - For managers of health facilities and hospital federations, the implementation of occupational health measures contributes to fulfilling the duty of care of the employer, regulatory compliance with occupational health and safety standards, reduced absenteeism, and increased work productivity, morale and retention of health workers. Work improvements in health care are also a factor for advancing the quality of care, patient safety and IPC. Additionally, a national programme may provide a level playing field so that all health facilities, whether public or private, are treated equally in terms of occupational health and safety requirements.
  - For government leaders and national policy-makers, the programmes on occupational health and safety for health workers demonstrate that they care about health workers by improving working conditions, respecting labour rights and promoting decent work in the health sector. Such programmes also provide an opportunity for coordinated action by public health and labour programmes towards common objectives and for social dialogue regarding occupational health and safety and the promotion of decent work in the health sector.

- Make use of existing occupational health and safety policies and legislation to show how the occupational health and safety programmes for health workers fit with the national agenda.
- Demonstrate how the programme will contribute to strengthening the health system and the overall health goals, such as universal health coverage and healthy workers.
- Encourage adherence to international commitments – such as resolutions of the United National General Assembly, the World Health Assembly and ILO conventions – which continually urge Member States to attach a higher priority to protecting and safeguarding the health, safety and well-being of health workers.
- Build critical human resource capacity for occupational health and safety in the health sector.

Box 25. Management commitment for the implementation of health and safety standards for the health care industry in New Zealand

In New Zealand, the Ministry of Labour issued *Guidelines for the provision of facilities and general safety and health in the healthcare industry* in order to meet the requirements of the Health and Safety in Employment Act 1992 and Regulations 1995 *(67)*. The guidelines, which emphasize management commitment and integration of occupational health and safety into the business strategies of health facilities, state:

"The most effective approach to managing health and safety in the healthcare industry is to integrate health and safety with a facility's management objectives. A systematic approach, where health and safety objectives are managed in the same way as financial, service or quality objectives will help to achieve a high standard of health and safety performance.

"The leadership and commitment of management provide an essential foundation for an effective health and safety programme. The successful coordination of the activities of employees towards a common objective depends on the degree of management commitment and involvement. This should be reflected in the management's knowledge of the particular health and safety needs of the organisation and the conviction that high standards are attainable. Management are responsible for ensuring that the facility has appropriate policies, programmes, and adequate resources (both personnel and financial resources) in place to provide a healthy and safe workplace."

Source: Guidelines for the provision of facilities and general safety and health in the healthcare industry. Wellington: Ministry of Labour (https://worksafe.govt.nz/dmsdocument/389-guidelines-for-the-provision-of-facilities-and-general-safety-in-the-healthcare-industry, accessed 12 October 2021).

Box 26. Occupational health, safety and environment policy of a district hospital in Thailand

Rayong Hospital is determined to be a hospital of excellence in providing occupational health services through management of the work and workplace environment for the safety of staff, service providers and service recipients. Occupational health, safety and environment is an important activity that fulfils the vision of the hospital. Consequently, the hospital planned its actions on occupational health, safety and environment by introducing the following policies:

1. The hospital will manage occupational health, safety and the work environment in accordance with the law and other requirements.
2. The hospital will establish and maintain the occupational health, safety and environment management system and its continuous improvement.
3. The hospital will support occupational health, safety and the work environment in accordance with the planned work continuously and will follow up the results.

4. The hospital will provide and support adequate and appropriate resources for occupational health, safety and the environment.
5. The hospital will improve the working environment and surrounding environment to make them safe for service recipients and service providers.
6. The hospital will support communication and disseminate information and activities on occupational health, safety and the environment.
7. All hospital personnel must consider the safety of themselves and their colleagues, as well as the service recipients and the hospital's property at all times during their work.
8. The hospital arranges periodic reviews of this policy to ensure it is always appropriate.

Source: Rayong District Hospital, Thailand (in Thai) (https://www.rayonghealth.com/occ/attach/news_1560752183_Occupational%20Health%20Policy%20Announcement%20Safety%20and%20Environment.docx, accessed 2 December 2021).

STEP 2: Assess the current situation

Before embarking on developing the national or facility programme on occupational health and safety for health workers, it is useful to carry out a rapid assessment of health and safety at work. The assessment report is expected to describe the current situation of occupational health and safety in the country's health system vis-à-vis the elements of the WHO/ILO global framework (see Box 1). This includes describing the existing elements, gaps, need for upgrades, number of health workers and health facilities, organization of the health system, the regulatory and policy basis of occupational health and safety and its application in the health sector. It would be useful to involve key stakeholders in the analysis of the current situation.

The purpose of the report is to provide a basis for the development of the occupational health and safety programme for health workers. The report can synthesize existing evidence, statistical data, government reports and documents, scientific reports and publications (Box 27). It should be short and concise. Annex 1 provides an annotated outline of a national assessment report.

Box 27. Occupational health and safety in health care settings in Thailand – situation and policy implementation

In Thailand, some 300 000 health workers work in 1300 health facilities. During 2014–2017, the report of a survey of 150 hospitals showed that health workers were exposed to a variety of occupational hazards – such as ergonomic hazards (25%), biological hazards (22%), psychological hazards (19%), unsafe working conditions (15%), physical hazards (13%) and chemical hazards (12%) *(68)*. In addition, other studies showed high prevalence of occupational disease among health workers. For instance, TB infection among health workers was 2% (2.67 times higher than in the general population) *(69)* and there was a high rate of musculoskeletal disorders (83.9%) among perioperative nurses *(70)*.

The occupational health programme for health workers has been implemented throughout the country since 2007. The programme supports health care facilities in complying with the Occupational Safety, Health and Working Environment Act issued by the Ministry of Labour. Currently, most health care facilities – and especially hospitals under the Ministry of Public Health – have occupational health programmes and apply for accreditation of occupational health services. The programmes in hospitals are mostly run by occupational health nurses. Research has demonstrated their good performance and has indicated the need for continued support for training and education *(71)*.

Individual health facilities can assess their situation using simple checklists to identify the existing elements of occupational health and safety before developing an occupational health and safety programme (Box 28).

Box 28. Protection of health and safety of health workers: checklist for health care facilities

This checklist can be the first step in identifying and prioritizing areas of action for improving the protection of health and safety of health workers in line with the WHO–ILO Joint Global Framework for National Occupational Health Programmes for Health Workers.

The checklist is designed to be completed in discussion with management, responsible officers for occupational health, environmental health, IPC, human resources and representatives of workers in the health facility. This participatory approach will provide a variety of perspectives and a more comprehensive basis for identifying existing preventive measures, possible problems and solutions for continuous improvement.

Using this checklist to begin this process provides an overview of areas where specific actions can be proposed and helps to determine priorities to guide planning for improvements.

Source: Protection of health and safety of health workers: checklist for healthcare facilities. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/protection-of-health-and-safety-of-health-workers, accessed 12 October 2021).

STEP 3: Establish a task force and conduct a stakeholder analysis

The drafting of programmes for occupational health and safety for health workers requires a devoted task force with a clear mandate and deadlines. The composition of the task force should aim to bring together the most relevant areas of technical expertise and viewpoints and should include the perspectives of workers, employers and other key stakeholders. The membership of the task force should be balanced in terms of gender. The task force is a temporary working group with the specific task of drafting the programme and ensuring coordination and consultation with key stakeholders in the process of programme development. As such it is different from the permanent committees to steer the implementation of programmes for occupational health and safety of health workers at national, subnational, and facility levels.

A systematic analysis of stakeholders at national, subnational and/or facility levels can help to identify actors and entities in the public and private sectors and in the community, who may have an interest or role in occupational health and safety for health workers. This will assist in determining the added value of the programme for them, their level of interest in the programme and their power to influence its process and outcomes. The analysis will help to determine how best to involve and communicate with each of these stakeholder groups throughout programme development and implementation.

Stakeholders can be from the health sector and from other sectors (Boxes 29 and 30). Within the ministry of health, active coordination is crucial between occupational health and other programmes (e.g. human resources, finance, logistics, quality of care, patient safety, IPC, TB, hepatitis, HIV/AIDS etc.). Key stakeholders to be involved are also the trade unions of health workers and the representative organizations of employers in the health sector. Other stakeholders within the health sector may include private sector health organizations, professional associations of health care providers, hospital federations, accreditation bodies for health facilities, and research institutions and the academic community. Stakeholders outside the health sector may include the ministries of labour, environment, science and education, as well as organizations of employers, trade unions, social security associations, insurance bodies, business associations and civil society groups.

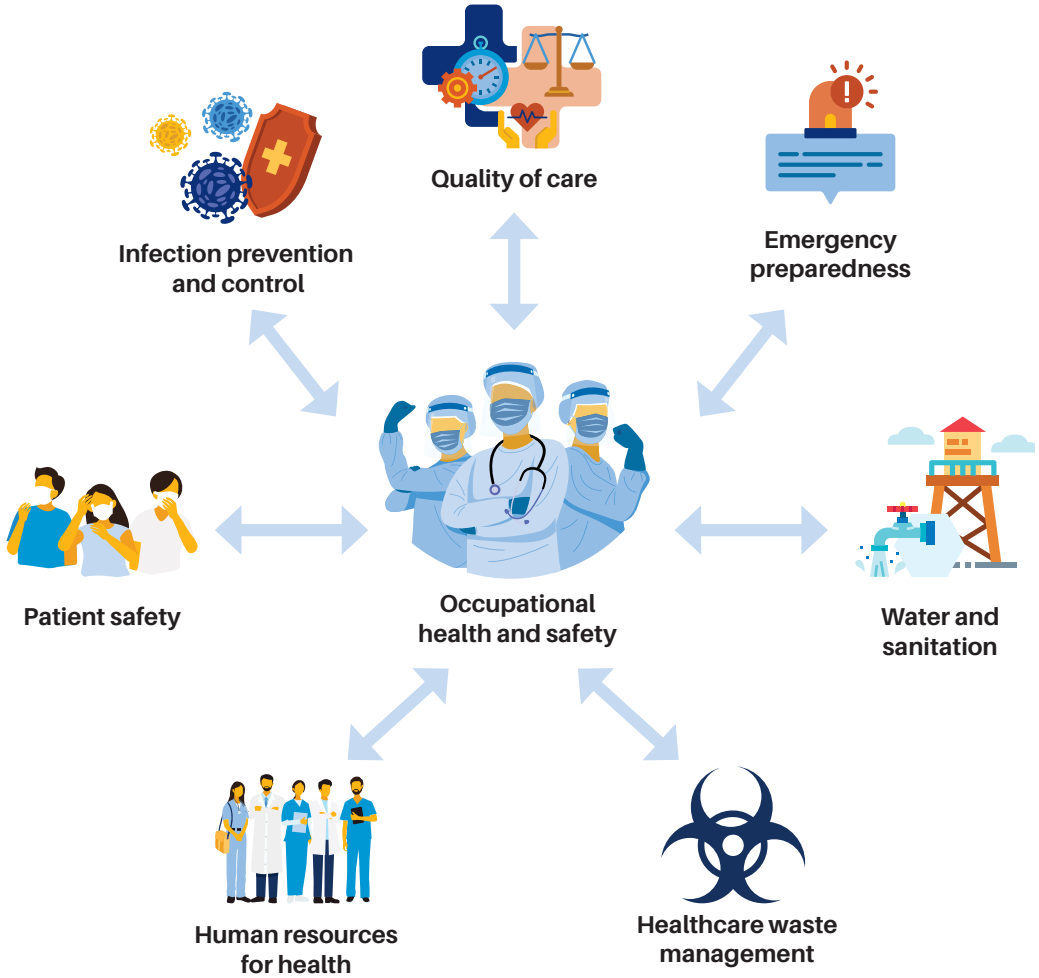
At the facility level, stakeholders may include employers, managers, workers' representatives, subcontractors (e.g. cleaners, health care waste management, catering) and other facility programmes such as patient safety, infection prevention and environmental sustainability, local authorities and community leaders.

Development of the programme may require multistakeholder meetings to discuss the results of the assessment of the current situation and the draft programme. It is important to ensure regular communication with, and feedback from, stakeholders throughout the whole programme development process.

Box 29. The link between occupational health and safety and other programmes in the health system in Togo

For the development of the national plan of action on occupational health and safety for health workers, the Occupational Medicine Unit of the Ministry of Health and Social Protection of Togo engaged the programme managers responsible for other related programmes in the ministry, as shown in the ministry's strategic plan on health and safety for health workers.

Relations with other programmes



Source: Plan stratégique de sécurité et santé au travail pour le personnel de santé au Togo: 2017–2022. Lomé: 2017 (https://divprosante.tg/wp-content/uploads/2021/08/Plan-strategique-SST-PS_Togo-2017-2022_VF-3.pdf, accessed 11 October 2021).

Box 30: Intersectoral collaboration for development of the national programme in Croatia

The National Programme on Occupational Health and Safety for Persons Employed in Health Care for the period 2015–2020 was prepared by the Ministry of Health in cooperation with the Croatian School of Public Health. In the process of developing the programme, various stakeholders were consulted, including:

- Ministry of Labour and Pensions;
- National Council for Occupational Health and Safety;
- Institute for Protection of Health and Safety at Work;
- Medical Association, Medical Chamber, Medical Union, Nursing Council, Nurses Association, and associations of pharmacists, medical biochemists, dentists, health professionals, midwives;
- Trade Union of Nurses and Medical Technicians;
- Health Insurance Fund; and
- the Agency for Quality and Accreditation in Health Care and Social Welfare.

Source: National program on occupational health and safety for persons employed in health care for the period of 2015–2020. Zagreb: Ministry of Health of Croatia; 2015 (https://zdravlje.gov.hr/UserDocsImages//Programi%20i%20projekti%20-%20Ostali%20programi//NATIONAL%20PROGRAMME%20ON%20OCCUPATIONAL%20HEALTH%20AND%20SAFETY%20FOR%20PERSONS%20EMPLOYED%20IN%20HEALTH%20CARE.pdf, accessed 12 October 2021).

STEP 4: Write the first draft of the programme

When the situational analysis has been completed and the members of the task force have been identified, the first draft of the programme can be written. Different members of the team can be assigned to draft specific sections depending on their expertise. Individuals should draft sections on topics in which they are skilled and are most knowledgeable. These drafts can be shared with other team members, or an editor, for reviewing, editing and revision. A model for national programmes for occupational health and safety of health workers is provided in Annex 2.

STEP 5: Carry out a feasibility assessment

The programme may be piloted in selected health facilities and subnational jurisdictions to obtain feedback on its feasibility for implementation and to foresee potential barriers to implementation. For the purpose of piloting, it is important to select a range of health facilities and districts that represent different contexts.

The assessment of the current situation and the piloting can yield information for costing of the programme at national and facility levels (Box 31). This requires identification of the resources needed for implementation, including building human resources (i.e. hiring and/or training existing workers) and providing equipment. Other factors that will influence the costing process include the model of service delivery (e.g. in-house versus outsourced) and the number of service components included (e.g. occupational health only versus inclusion of services such as primary health care, travel medicine, employee assistance programmes and wellness programmes).

The preliminary budget will become more refined as the programme proceeds. For the programme to be sustainable, the budget should be funded from internal funding sources with minimal dependency on external donors.

Box 31. Funding for work improvement in health-care facilities in France

In 2012 the Ministry of Health of France established a mechanism for financial support for work improvement in health care facilities. Partial funding of projects for workplace improvement can be obtained through the regional health agency. For this purpose, health care facilities have to prepare a project for workplace improvement, demonstrating the benefits for health and safety of health workers. The project has to be agreed by the facility health and safety committee and validated by the occupational health service.

Source: The circular No DGOS/RH3/MEIMS/2012/228 (8 June 2012) from the Directorate of Judicial Affairs which established the mechanism can be seen (in French) at: http://affairesjuridiques.aphp.fr/textes/circulaire-n-dgosrh3meims2012228-du-8-juin-2012-relative-aux-mesures-damelioration-des-conditions-de-travail-des-personnels-des-etablissements-de-sante-et-daccompagnement-social-d/ (accessed 12 October 2021).

STEP 6: Discuss the first draft with key stakeholders and ensure their engagement

After the programme has been drafted, a meeting may be held with key stakeholders to review it (Box 32). The meeting can serve as a platform to:

- interact and receive input from different individuals and groups who have a stake in occupational health and safety for health workers;
- validate the findings from the situation analysis and lessons learned from the feasibility assessment;
- fill information gaps identified in the situation analysis and the first draft of the programme; and
- ensure buy-in and build support by engaging key stakeholders and key players from the beginning of the development of the programme.

The following steps may be considered for a successful stakeholder workshop or meeting:

1. Identify the stakeholders who will attend the meeting.
2. Agree on a suitable date for the meeting.
3. Send the first draft of the programme and the agenda early enough for comments and ensure that participants have enough time to consider the materials before the meeting.
4. Consider practical details (e.g. an appropriate time of day and day of the week for the target audience, a suitable venue or an online platform that is familiar to most stakeholders).
5. After completion, write a report of the meeting and disseminate it to participants as soon as possible.

Box 32. Stakeholder engagement in the United Republic of Tanzania

In 2017 the Tanzania Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) set out to develop national guidelines for workers' health and safety in health care facilities and emergency responders. A technical team was formed of MoHCDGEC staff, WHO, universities, occupational health and safety agencies and target users to help develop a draft guideline.

After developing the first draft of the guideline, the MoHCDGEC organized two stakeholder meetings. Each meeting lasted three days and involved hospital managers, officials from the Occupational Safety and Health Authority (OSHA), the Workers Compensation Fund (WCF), regional and district management teams, universities, research institutions, professional associations of health workers and trade unions. The stakeholder meetings provided a forum for participants to discuss how to improve occupational health, safety and well-being for health workers and enhanced collaboration between the MoHCDGEC and key stakeholders. Prior to the meetings, the draft guideline was circulated for stakeholders to familiarize themselves with the text. At the first meeting, the guideline was presented, and the scope, objectives and contents were summarized. After the presentation, participants joined different working groups focusing on specific chapters of the guideline. Discussions at the first stakeholder meeting helped in revising the guideline before the second meeting.

At the second meeting, the same stakeholder groups were invited and the revised draft guideline was presented for final review. Once the guideline was finalized, it was sent to the Permanent Secretary of MoHCDGEC and the Tanzania's Chief Medical Officer for signature before being published in March 2019.

Source: Tanzania Ministry of Health, Community Development, Gender, Elderly and Children.

STEP 7: Develop a second draft

The second draft of the programme document should be developed, taking into consideration the comments provided by stakeholders during the consultations. When writing the second draft it is important to ensure that the text is simple, concise, clear, consistent and understandable. Since writers have different styles, one person may be assigned to review the final draft to ensure consistency in writing – and especially in the use of appropriate terminology and clarity of language for end-users. This person, who will act as an editor, should review the final draft of the programme document after the team has agreed on the content.

STEP 8: Finalize, obtain approval, publish and disseminate

After the programme document has been finalized and formally approved, it should be published and widely disseminated among the target groups. This may help to increase visibility, share best practices, build relationships with stakeholders and key players, strengthen political commitment and attract more funding. The dissemination plan may include:

- Publishing the programme document or policy briefs.
- Presenting the final programme document to stakeholders, including representative organizations of workers and employers in the health sector.
- Presenting the programme at national conferences and meetings of professional associations of health workers.
- Distribution of the programme document to all health facilities in print or digital format.
- Sharing information through social media and/or on the websites of the ministries of health and labour.
- Issuing a press release, or discussing the programme's content on local radio, on television or in newspapers.
- Training of focal points for occupational health and safety for health workers.
- Hosting health promotion events and campaigns in health facilities.

The facility occupational health and safety policy and information about its implementation should be made available to all workers. The programme can be launched at staff meetings by the facility manager, and posters with the main points can be displayed at staff areas for easy reference.

CHAPTER 5.

PROGRAMME IMPLEMENTATION

Once the programme has been developed, it should be implemented at national, district and facility levels in accordance with the national policy. The following elements should be in place to roll out the implementation:

- The national policy on occupational health and safety in the health sector should be endorsed and resources should be committed.
- Regulations should be available on occupational health and safety in the health sector and there should be a basic set of occupational health standards to ensure that all workplaces comply with minimum occupational health and safety requirements.
- There should be an appropriate level of enforcement by an inspection agency, strengthening workplace health inspection, and building up collaboration between competent regulatory agencies according to specific national circumstances.
- Organizational arrangements should be in place for programme implementation, monitoring and evaluation.
- There should be mechanisms for coordination and collaboration with stakeholders.
- A trained workforce should be available for occupational health at different levels of the health sector, and training plans and programmes should cover all categories of workers at risk.
- Mechanisms must link occupational health with other health programmes as well as with programmes in sectors other than health.
- The implementation plan should be rolled out at all levels.

Based on experiences from countries, the following steps may be considered for successful programme implementation:

STEP 1: Develop a plan of action for implementation/roll-out at different levels, in stages.

STEP 2: Arrange for external inspection, audit and licensure.

STEP 3: Develop communication and technical tools for implementation.

STEP 4: Build capacities for implementation.

STEP 5: Monitor, evaluate and adjust the programme.

STEP 1: Develop a plan of action

The plan of action outlines a sequence of steps that must be taken, or activities that must be performed well over defined periods of time, for the occupational health and safety programme to be successfully implemented. This plan should take a stepwise approach to rolling out programme implementation at different levels of the health system and in different parts of health facilities. The involvement of key stakeholders and the health and safety committee in the development of the plan is essential for its successful implementation.

The action plan should include the following headings:

- Technical area in need of improvement.
- Description of the problem.
- Proposed improvement.
- Date of completion.
- Who is responsible?
- What is needed?
- Current status at [date]?

Boxes 33 and 34 provide examples of action plans at national and facility levels

Box 33: Strategic five-year plan for improving occupational health and safety of health workers in Togo (2017–2022)

The Ministry of Health and Social Protection of Togo adopted a strategic plan of action for the period 2017–2022. The plan of action was based on: 1) a review of the current situation and an analysis of the strengths, weaknesses and opportunities of the system for occupational health and safety of health workers; and 2) consultations with key stakeholders. In addition to its strategic objectives and key interventions, the plan provides a framework for implementation at national, subnational and facility levels. Indicators are provided for monitoring progress annually on the basis of baseline and target values. The plan also contains mechanisms for evaluation at different levels of the health system, as well as an estimated budget and a resource mobilization strategy.

Source: Plan stratégique de sécurité et santé au travail pour le personnel de santé au Togo, 2017–2022. Lomé: 2017 (https://divprosante.tg/wp-content/uploads/2021/08/Plan-strategique-SST-PS_Togo-2017-2022_VF-3.pdf, accessed 11 October 2021).

Box 34. Example of an action plan: HealthWISE pilot hospital in Dakar, Senegal, 2011

Technical area	Description of problem	Proposed action for improvement	Date of completion	Who is responsible	What is needed	Current status (09/ 2011)
Management and motivation of staff	Staff functions and activities not formally described	Update and generalize job descriptions Hold information meetings Review tasks Develop job descriptions Share and validate job descriptions Print and distribute the job descriptions Follow-up	10/2011	Human resources department	Staff time. Human Resources officer Computer Paper and ink cartridge for printer	*started
Management of occupational hazards	Staff do not have sufficient knowledge of HIV and AIDS and the ways of transmission	Organize staff training on HIV and AIDS Inform Management Estimate costs Disseminate formal announcement to inform staff Conduct training	11/2011	Occupational health doctor Infection control officer Quality assurance officer	Staff time for participation Room for training	*started

Source: HealthWISE Action Manual. Work improvement in health services. ILO/WHO *(53)*.

STEP 2: Arrange for external inspection, audit and licensure

Regulations covering occupational health and safety stipulate general rules and obligations for health and safety at work and provide specific requirements for managing occupational health hazards. Occupational health and safety regulations may cover occupational health issues specific to the health sector.

The ministry of health may have the primary responsibility for managing occupational health and safety in the health sector in line with national regulations. However, the responsibility for monitoring regulatory compliance and provision of technical advice on occupational health and safety may be assigned to another government agency, such as the labour inspectorate and/or occupational health and safety authority under the ministry responsible for labour. Consequently, close collaboration between the two ministries is needed at different levels of implementation (Box 35). This collaboration may include orientation of the labour inspectorate on occupational health hazards and risks in the health sector (which becomes important as new technologies are introduced into the health sector), as well as arranging for the inspection of health facilities (and follow-up of control measures) by the labour inspectorate in collaboration with the focal points for occupational health and safety for health workers at the health facilities.

Countries or jurisdictions may have mechanisms in place to ensure the quality and safety of care, such as institutional licensure, inspection and external evaluation. Since the health and safety of health workers is a recognized element of the quality and safety of care, these mechanisms may also serve to check the compliance of health facilities with occupational health and safety requirements (e.g. the availability and elements of a facility's occupational health and safety policy).

Box 35. Inspection of health facilities by the labour inspectorate and the national health surveillance agency in Brazil

Brazil has the world's largest public health system, with specific responsibilities at the federal, state and municipal levels. Besides the Ministry of Labour and Social Affairs (MTPS) regulations presented in Box 4 (see Chapter 1), all health care services in Brazil must follow the standards of the Ministry of Health through Brazil's National Health Regulatory System (SNVS). The SNVS comprises the Brazilian Health Regulatory Agency (Anvisa) at the federal level, and the surveillance services at state and municipal levels. These surveillance services are commonly divided into "health surveillance", "occupational health surveillance", "environmental surveillance" and "epidemiological surveillance" but arrangements may vary in different states and cities.

Anvisa is the coordinator of the SNVS and is responsible for the national regulations, including: 1) regulations for health services, such as the *Good operating practice requirements for health services* (RDC 63/2011); and 2) the technical notes issued during the COVID-19 pandemic in *Guidelines for health services: prevention and control measures during the assistance of suspected and confirmed infection by the SARS-CoV-2* (NT 4/2020) and *Guidelines for prevention and epidemiological surveillance of COVID-19 infections inside health services* (NT 07/2020).

The states and municipalities are responsible for the education and inspection strategies and can issue complementary norms taking account of the specificities of their territories. In general, the State Authority coordinates the SNVS at the state level, provides technical cooperation with municipalities and helps them to conduct inspections in more complex and state services. Municipal health surveillance is responsible for coordinating and carrying out local surveillance actions and sanitary inspections. Furthermore, in order to strengthen these actions, states and municipalities can expand the responsibility for inspection to other competent surveillance agents – such as the Reference Centers for Occupational Health (Cerest), which are managed by the General Coordination of Occupational Health (CGSAT) of the Ministry of Health. In health services, the inspections are conducted by local authorities on the basis of federal regulations – specific rules from Anvisa and labour regulations from the MTPS – as well as local regulations in a comprehensive manner to enforce good practices in health services and to protect the health worker.

Ideally, these services act in a complementary and supplementary way to protect health and prevent disease. They must cooperate at the three levels, to cover more than 5500 municipalities in Brazil.

Sources: From Brazil's Agência Nacional de Vigilância Sanitária (Anvisa) in Portuguese: *https:*//www.gov.br/anvisa/pt-br/assuntos/snvs; *https:*//www.gov.br/anvisa/pt-br/assuntos/regulamentacao/legislacao/bibliotecas-tematicas/arquivos/snvs/; *https:*//www.gov.br/anvisa/pt-br/assuntos/servicosdesaude (all accessed 12 October 2021).

Accreditation involves setting performance standards and reviewing whether these standards are met in health care institutions. The process of accreditation involves a recognized body assessing and acknowledging that a health care organization meets predetermined and published standards. Some programmes for accreditation of health facilities also include standards for occupational health and safety (Box 36).

The inclusion of programmes for occupational health and safety for health workers as a requirement in facility quality and safety of care or accreditation can:

- stimulate and improve the integration and management of occupational health services in health facilities;
- maintain and improve the quality of occupational health services provided to health workers; and
- have a positive impact on the occupational health outcomes of health workers through development and promotion of better risk management programmes, increased staff motivation and retention.

However, when accreditation is voluntary, it may create inequalities in the protection of the health and safety of health workers both between and within health facilities. For instance, a large private hospital with accreditation will need to maintain a functional system for managing occupational health and safety, or in a public hospital it may be that only the clinical laboratory is accredited and provides a higher level of protection for its workers compared to other departments.

Box 36. Accreditation of health care facilities: an example from Lebanon

In Lebanon, the national accreditation of hospitals began in 2001–2002. The system is managed by the Ministry of Public Health. The accreditation manual includes 593 standards, eight of which are related to occupational health and safety, namely:

HC[d] 10. Occupational health and safety programme is developed and implemented.

HC 11. There is evidence of accident and incident reporting and a resolution procedure.

HC 12. The hospital ensures that all staff are safe from the radiation hazards.

HC 13. Patients and staff are protected from unnecessary laser beams exposure, when applicable.

HC 14. Staff (clinical and non-clinical) are educated, trained and evaluated for their role in attaining a safe and effective patient care facility.

HC 15. A violence prevention plan is implemented, evaluated and integrated into the occupational health and safety programme.

HC 16. Staff are regularly educated and trained on techniques to prevent and respond to violent and/or aggressive patient and family acts.

HC 17. The hospital ensures a work–life balance of its staff.

A study in 2016 found that the majority of participating private hospitals were accredited. Accredited hospitals reported statistically better performance in occupational health and safety than non-accredited hospitals based on the standards outlined in the accreditation manual.

Sources:

Revised accreditation standards for hospitals in Lebanon. Beirut: Ministry of Public Health; 2019 (https://www.moph.gov.lb/DynamicPages/download_file/4024, accessed 13 October 2021)

Habib RR, Blanche G, Souha F, El-Jardali F, Nuwayhid I. Occupational health and safety in hospitals accreditation system: the case of Lebanon. Int J Occup Environ Health. 2016;201–8 (https://www.tandfonline.com/doi/full/10.1080/10773525.2016.1200211, accessed 13 October 2021).

Auditing is another mechanism for stimulating the implementation of occupational health and safety programmes in health facilities. It may be carried out as part of the general audit of health facilities for compliance with the requirements for quality and safety of care. The audit would include an evaluation of the elements of the occupational health and safety programme or a subset of these, as appropriate (Box 37). The ILO Guidelines on occupational safety and health management systems *(2)* provide guidance on the content and the organization of audits of occupational safety and health management that can be adapted to the specific context of health facilities.

[d] Human Capital

Box 37. Specification for performance audits in Ghana Health Service

Occupational health and safety policy and guidelines for the health sector specify that regular audits will be performed internally (two times a year as a minimum) and external audits should be performed periodically (every two years at the minimum). The audits should cover:

- occupational health and safety policies/rules/regulations and their review;
- inventory of health and safety risks and ongoing monitoring;
- control measures for risks;
- results/trends in health surveillance;
- trends in accident statistics;
- training of staff in health and safety;
- emergency response plans and procedures and their effectiveness.

Source: Occupational health and safety policy and guidelines for the health sector, Ministry of Health, Ghana. (https://www.moh.gov.gh/wp-content/uploads/2016/02/Occupational-Health-Safety-Policy-Guidelines-for-Health-Sector.pdf , accessed 19 October 2021) *(72)*.

STEP 3: Develop communication and technical tools

Successful implementation of the programme will be a function of how it is understood and embraced by health workers and other key stakeholders. It is important to ensure that the objectives and benefits of the programme, as well as the roles and responsibilities of all actors are clearly communicated.

Although the programme will be developed as an open and consultative process involving many stakeholders, its value will be fully realized after it has been widely disseminated and communicated effectively to ensure buy-in. This can be accomplished through:

- A launch event that marks the beginning of actions of the government's plans for occupational health and safety for health workers (the official launch will also ensure that the programme receives the attention and support it requires).
- Organization of events with health workers – and other key organizations representing health workers – at places where the programme will be introduced.
- Recognition of the programme as an integral part of the national agenda for strengthening the health system.
- Establishing mechanisms for feedback from health workers, health facility managers and other interested parties, which will inform the regular review and amendment of the programme.
- Creation of a scheme for providing incentives and recognition of good performance by health facilities and subnational health teams.

- Setting up communities of practice for the exchange of ideas and experience in protecting health and safety at work in the health sector.

Other communication tools for effective dissemination of the programme may include video conferences, webinars, posting on websites and blogs, posters, podcasts, webcasts, intranet bulletin boards, dashboards and a dedicated programme newsletter.

STEP 4: Build capacities for implementation

Capacity-building will strengthen the programme's ability to attain the intended goals and objectives. It is crucial for the programme to have a capacity-building strategy that will inform the overall implementation plan.

The following capacity-building dimensions may be considered for a successful implementation of the occupational health and safety programme for health workers:

- Resources: trained workers to run the programme, facilities and equipment.
- Infrastructure: organizational structures, health information systems, and policies that guide programme implementation.
- Knowledge and skills: development of health workers' expertise, competencies and leadership skills.
- Culture: cultivation of a preventive culture with shared commitment to the programme goals and objectives.
- Engagement and partnership: internal and external collaboration and connections with other key actors.

In some cases, the programme may need to address capacity needs before starting the implementation plan. For instance, countries, provinces or districts with no occupational health experts in the public health sector who are able to lead the programme will have difficulties moving forward with implementation. In such cases, a programme team may need to build its capacity first or start the implementation activities while accessing external expertise and building internal capacity at the same time. This may include bringing in external trainers to conduct training-of-trainers sessions for the focal points for occupational health and safety for health workers.

It is important to note that capacity-building is a dynamic process, and some areas may need more time than others. Given the constraints on time and resources, the programme team must be strategic when deciding which areas to prioritize for capacity-building to meet existing needs and gaps.

STEP 5: Monitor and evaluate the programme

The purpose of the monitoring and evaluation process is to assess whether:

- The outcomes of the programme are in line with the long-term goals of the national and facility policies on occupational health and safety for health workers.
- The activities in place are operating effectively.
- The mid-term goals are likely to be met, or the strategies need to be adjusted.
- The priorities need to be different and the medium- and long-term goals need to be refocused.

Regular performance measurement of occupational health and safety programmes for health workers is crucial because it provides information for continual improvement. Two types of indicators – leading and lagging – can be used to measure performance. Leading indicators are proactive, preventive and predictive tools for effective performance. They measure events leading up to injuries, diseases and other incidents and may reveal underlying problems in the programme. On the other hand, lagging indicators are reactive measures of programme performance that assess the occurrence of incidents after they have occurred – e.g. the number and types of injuries or diseases. Table 1 provides examples of leading and lagging indicators that may be considered for monitoring and evaluating the implementation of occupational programmes for health workers. A good programme uses leading indicators to drive change and lagging indicators to measure effectiveness (Boxes 38 and 39).

Table 1. Leading and lagging indicators for monitoring and evaluation of an occupational health and safety programme for health workers

Leading indicators	Lagging indicators
• Number or percentage of workers provided with training courses on occupational health and safety for health workers. • Number of occupational risk assessments conducted. • Number of medical surveillance examinations for health workers conducted. • Number of health facilities where control measures for preventing hazardous exposures have been instituted.	• Number of reported incidents with blood exposure (e.g. blood splashes, needle-sticks, sharps injuries). • Number of health workers reporting work-related diseases. • Number of health workers who received post-exposure prophylaxis. • Frequency and severity of slips, trips and falls in the health sector. • Number of reported violence incidents (physical, verbal, sexual). • Work-related fatalities.

Leading indicators	Lagging indicators
• Number of facilities with joint labour–management health and safety committees. • Number of meetings of the health and safety committees. • Existence of facility focal points for occupational health and safety in health facilities. • Human and financial resources for programme implementation. • Regulation and administration of prevention and compensation of occupational injuries and diseases. • Research capacity for occupational health and safety for health workers. • Initiatives to improve the preventive culture in health facilities.	• Number of work days lost due to occupational injuries or diseases. • Medical claims and workers' compensation costs. • Number of days of absence due to sickness. • Number of non-conformities with the legal requirements relevant to occupational health and safety. • The cost of occupational accidents and diseases.

Box 38. Occupational health indicators under National Health Workforce Accounts

The WHO National Health Workforce Accounts is a harmonized, integrated approach for annual and timely collection of health workforce information. The National Health Workforce Accounts aim to improve the information architecture and interoperability, and help to define core indicators in support of strategic workforce planning and global monitoring. Examples of occupational health and safety indicators to be collected at country level as part of National Health Workforce Accounts include:

Working time

- Average annual number of hours worked, by cadre.
- Percentage of total employment (in full-time equivalent) to total active health workers, by facility type.
- Percentage of part-time health workers in the total health workforce, by sex and cadre.

Decent work

- Existence of a law, policy or regulation regulating working hours.
- Existence of a law, policy or regulation regulating minimum wage.

Labour market characteristics

- Percentage of health workers by status in employment to total number of health workers, by cadre, by facility type.
- Percentage of health workers engaging in dual practice, by cadre and by facility ownership type.

Working conditions

- Existence of national occupational health and safety plans or programmes.
- Percentage of health workers who experienced a violent attack in the past 12 months, by type of attack.
- Existence of governmental measures for the prevention of attacks on health workers.

Work–family balance

- Existence of a policy or programme regarding the right to parental leave, flexible leave arrangements, childcare support or career break schemes, by sex.

Source: WHO, National health workforce accounts: a handbook (https://apps.who.int/iris/handle/10665/259360, accessed 12 October 2021) *(73)*.

Box 39. Information system for occupational health and safety for health workers in South Africa (OHASIS)

OHASIS is a comprehensive occupational health information programme that was initially developed by the University of British Columbia and improved by the National Institute for Occupational Health, a division of the National Health Laboratory Service in South Africa. The National Health Laboratory Service is now the owner of the intellectual property of OHASIS.

The programme comprises a number of modules that assist in enhancing and monitoring the performance of an occupational health and safety programme. The OHASIS programme includes: 1) incident reporting and investigation, including recommendations on preventive measures; 2) management of employee health; 3) vaccination and immunity status of employees; 4) records on respirator fit testing; 5) workplace assessment and prioritization of control measures; 6) health and safety committee functions; 7) tracking of hazardous waste from pick-up to disposal; 8) health and safety audit of the facilities to ensure compliance; 9) equipment maintenance tracking; 10) self-reporting of incidents; 11) screening for TB, COVID-19 and COVID-19 vaccination adverse events; and 12) analytics with real-time graphical presentation of information captured.

OHASIS is a web-based programme, and the ultimate intention would be to provide every employee with access to relevant modules. Access would, however, be strictly controlled by password; for instance, only occupational medical staff would have access to an employee's medical-related information.

Source: The South African OHASIS website (http://www.ohasis.co.za/, accessed 12 October 2021).

It may be useful to create dedicated websites with a repository of regulations and practical tools and a dashboard for implementation.

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ANNEX 1. OUTLINE OF THE REPORT ON THE CURRENT SITUATION OF OCCUPATIONAL HEALTH AND SAFETY IN THE HEALTH SECTOR

The report is expected to describe the current situation of occupational health and safety in the health sector of the country in terms of the elements of the WHO/ILO joint global framework. The purpose of the report is to provide a basis for the development of the programmes for occupational health and safety for health workers at the national and health facility levels.

The report is expected to synthesize information about the existing measures for occupational health and safety in the health sector – regulations, statistical data, government reports and documents, scientific reports and publications, key informants' interviews. It should be short and concise, with at most 30 standard (single-spaced) pages, without the references.

The report can be developed in three stages:

1. Draft – review of current situation.
2. Stakeholders' workshop to review the draft and develop recommendations for strengthening the protection of health and safety of health workers.
3. Final report – completed on the basis of the deliberations and recommendations of the stakeholders' workshop.

The report should be published and widely disseminated.

1. Introduction

Explain the background, relevant political commitments, the context and purpose of the assessment of the national situation and how the results will be used.

2. Scope of the report

Explain the purpose of the report, what it covers (and does not cover) and what data sources were used for the report.

3. The health system of country

Provide a basic description of how the health system is organized, the type and number of health facilities and information on the health workforce based on existing data and reports.

4. Occupational health and safety problems in the health sector

Synthesize available evidence on the occupational health and safety problems in the health sector in the country based on a review of publications and reports published in the past 10 years. Also provide background on national occupational safety and health legislation, regulation and practice, taking into consideration international labour standards.

5. Existing elements of occupational health and safety programme in the health sector

Identify the elements of occupational health and safety activities for health workers that already exist at national, subnational and facility levels, as well as the gaps in protecting the occupational health and safety of health workers, in terms of the following:

- *Written occupational health and safety policies at the national, subnational and facility levels*

  Describe the regulations for occupational health and safety – and public health applicable to occupational health and safety – for health workers in different levels and workplaces in the health system and their coverage. Identify the gaps in regulation and groups of health workers and workplaces not covered by the existing regulations. Review collective agreements in the health sector if they have taken occupational health and safety for health workers into account and assess how those are implemented in practice.

- *Person/unit in charge of occupational health and safety of health workers at the national and facility levels*

  Indicate who is in charge of implementing the existing regulations at the national, district and facility levels. Explain the obligations of the ministries of health and labour and the employers/managers of health services for protecting the occupational health and safety for health workers under existing regulations.

- *Occupational health services, budget, personal protective equipment*

  Provide references to: 1) the regulations and practice for providing occupational health services for workers in health facilities; 2) the regulations and practice for providing personal protective equipment for health workers; and 3) the availability of special funds for improving working conditions in health facilities (i.e. sources of funding such as central domestic or donor funds, local authorities, private sector).

- *Joint labour–management committee for health and safety at work*

  Review: 1) existing policy and practice for social dialogue in the health sector at the central, district and facility levels; 2) any occupational health and safety issues that have been considered as part of the social dialogue; and 3) the existence of

any forums for collaboration between employers and workers in the health sector in terms of health and safety at work.

- *Ongoing (or periodic) education and training for responsible persons and the committee for health and safety at work*

  Provide information about ongoing training programmes on occupational health and safety that have elements dealing with the protection of health workers, or specific occupational health and safety training programmes for workers in health facilities. This should also include an assessment of the existing occupational health and safety competencies of responsible persons and members of committees.

- *Risk assessment of workplaces and processes*

  Describe existing methods and practices routinely applied for occupational health risk assessment in health services – all risks (biological, chemical, psychosocial, ergonomic, injuries) and specific programmes with risk assessment (such as IPC, ionizing radiation, risks of explosion and injuries).

- *Immunization against hepatitis B and other vaccine-preventable diseases*

  Provide references to the regulatory basis and practice for the immunization of health workers – which diseases, which vaccines, the rate of implementation, and the national immunization policy regarding health workers.

- *Exposure and incident reporting, recording and reporting of occupational accidents and diseases*

  Review existing regulations and practices for reporting of incidents and exposures (e.g. blood splashes, needle-stick injuries, violence, and those of reporting and recording of occupational accidents, injuries and diseases and their implementation in the health sector).

- *Diagnosis, treatment, care and support for HIV, TB and hepatitis B and C among health workers*

  Identify the services available to health workers for HIV, TB and hepatitis, and other occupational health services for occupational diseases of health workers.

- *Information systems, indicators*

  Point out the current indicators used to monitor the performance of health services regarding occupational health and safety for health workers (e.g. exposure to blood, cases with post-exposure prophylaxis, sickness absence, injuries etc).

- *Compensation for occupational injuries, disease and disability in accordance with national laws*

  Provide information on whether the national list of occupational diseases includes diseases affecting health workers (e.g. HIV, TB, hepatitis B and C, contact dermatitis/ latex allergy, low back pain etc.). Indicate whether health workers are covered by the national scheme for employment injury benefits and national health insurance.

- *Research and evaluation*

  Provide a synopsis of recent research projects on occupational health and safety for health workers. Describe existing research programmes and funds that include occupational health and safety for health workers.

- *Environmental hygiene*

  Refer to the existing regulations and proactive measures for the management of health-care waste, mercury and hazardous drugs, and whether they include measures for protection of the health and safety of health workers, and the availability of water, sanitation and hygiene services in health facilities.

6. Stakeholders for occupational health and safety in the health sector

Provide an analysis of stakeholders in the health sector by: 1) identifying the institutions (units, departments) in the public and private sectors, traditional medicine, civil society, organizations of health workers and employers, business associations, academic institutions and others that have a stake in improving working conditions in the health sector; 2) grouping them according to their levels of participation, interest and influence in the development and the implementation of the programmes for occupational health and safety for health workers; and 3) determining how best to involve and communicate to each of these stakeholder groups.

7. Summary of findings and gaps

Summarize the major findings of the review, particularly the main occupational health problems, and existing elements of occupational health and safety programmes in the health sector at national and facility levels. Identify strengths, weaknesses, opportunities and constraints in the light of the WHO/ILO global framework and consider them in the development of the national programme.

8. Conclusions and recommendations

On the basis of a workshop with stakeholders, provide short conclusions in terms of gaps and recommendations for priority actions to be implemented through the programme on occupational health and safety for health workers at national, subnational and facility levels.

ANNEX 2. MODEL FOR A NATIONAL POLICY FOR OCCUPATIONAL HEALTH AND SAFETY FOR HEALTH WORKERS

This model is an example of how a national programme can be described in a policy document to be approved by the government authority responsible for managing the health system in the country. It may be also useful for developing subnational programmes in individual jurisdictions with defined responsibilities for managing health systems.

National Policy for Occupational Health and Safety for Health Workers

Executive order of the [minister or permanent secretary] of health [and the minister or permanent secretary of labour], No XX from DD/MM/YYYY.

Policy statement

1. The ministry responsible for MMM of the Government of XXXX is committed to creating a safe and healthy working environment for all health workers and in all workplaces in the health system.

Purpose

2. The purpose of this policy is to set up a system for managing occupational health and safety in all workplaces in the health system in line with the provisions of the [Act for Health and Safety at Work of YYYY, the Public Health Act of YYYY, the Public Service Act of YYYY, the Occupational Health and Safety Policy of YYYY] and the other relevant government regulations and policies.

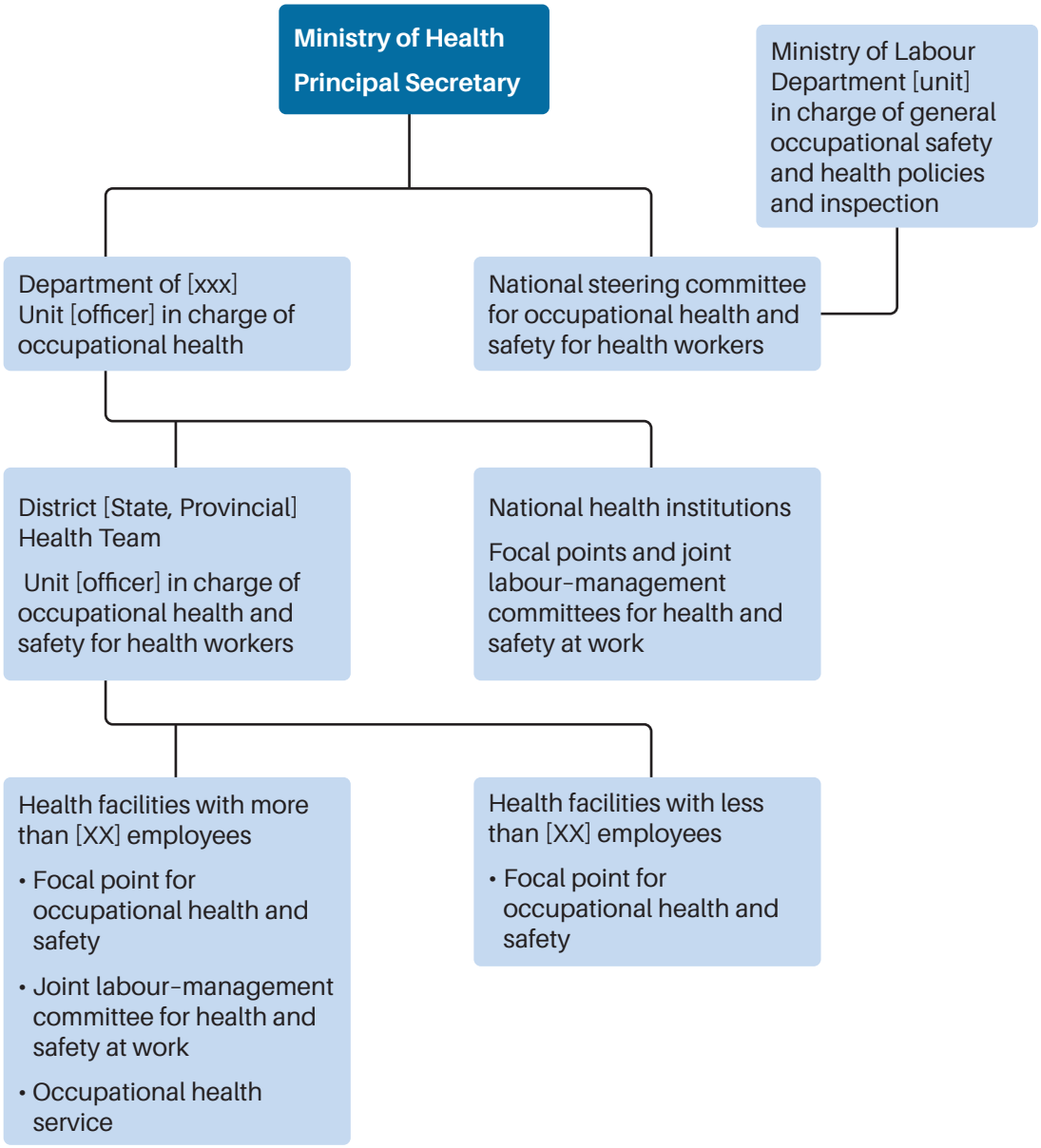
Scope

3. This policy applies to all workplaces and work settings and to all workers in the health system, public, private [and military health services?].
4. For the purpose of this programme:
    a. The health system includes all activities the primary purpose of which is to promote, restore and/or maintain health together with the people, institutions and resources, arranged together in accordance with established policies, to improve the health of the population they serve, while responding to people's legitimate expectations and protecting them against the cost of ill-health through a variety of activities whose primary intent is to improve health. [WHO definition of health system]

b. Health workers are defined as all people engaged in actions whose primary intent is to enhance health, including health service providers as well as health management and support workers who are employed by or work for an employer or under the direction or supervision of an employer in the health system, including volunteers and apprentices.

5. The implementation of this policy shall be organized according to the structure as shown in Figure 3 below (example for illustration purposes only):

Figure 3. Structure of the national programme for occupational health and safety for health workers



National steering committee

6. A National Steering Committee on Occupational Health and Safety for Health Workers in the Health System shall be established by order of the ministry [permanent secretary] responsible for [health] [in consultation with or jointly with the ministry responsible for labour] to provide leadership and coordination of national activities on occupational health and safety in the health system.
7. The National Committee will be composed by a chair and XX members nominated by the ministry [permanent secretary] of health, one member nominated by the ministry [permanent secretary] of labour, and members nominated by the representative organizations of workers and employers in the health system, the associations of health professionals [provide here the names of the associations – e.g. medical association, nursing association etc.] and by the hospital federation(s) [provide here the name(s) of a hospital federation(s) representing private health facilities]. A gender balance shall be achieved in the membership of the committee.
8. The tasks of the National Steering Committee shall be to:
    a. Identify the most common hazards and trends in the health and safety of health workers.
    b. Review and update policy guidelines on prevention of occupational hazards, occupational and work-related injuries and illnesses among health workers.
    c. Develop, establish or improve the systems for management of occupational health and safety in the health sector, including occupational health services.
    d. Consider and make recommendations to improve working conditions and occupational health and safety in the health sector.
    e. Develop proposals for senior policy-makers on matters related to occupational health and safety of health workers.
    f. Coordinate the implementation of these policy guidelines in line with other policy initiatives and government regulations.
    g. Ensure involvement of organizations of employers and workers in the health sector representing both public and private health services.
    h. Set up a national research agenda on the health, safety and well-being of health workers.
    i. Design or commission standardized education and training in occupational health and safety to build the capacity of managers and workers with responsibilities for occupational health.
    j. Promote awareness-raising campaigns among health workers.
    k. Review national reports on the state of occupational health in the health sector
    l. Coordinate protection of the health, safety and well-being of health and emergency aid workers in preparedness for, and the response to, public health emergencies.
    m. Devise a plan for capacity building on occupational health and safety for health workers at national, subnational and facility levels.

n. Develop proposals for establishing mechanisms for sustainable and effective financing for occupational health and safety management systems, services and activities.

9. The committee shall meet regularly [at least every three months]. The decisions shall be made by consensus [by simple majority] and the minutes of the meetings shall be sent to the [permanent secretary] for health [and labour].

Unit in charge of occupational health and safety of health workers at the national level

10. The [Occupational Health] Unit at the ministry responsible for health will be in charge of managing occupational health and safety in the health system, with the tasks to:

a. Develop policies and guides for the implementation of measures for protecting and promoting the health, safety and well-being of health workers.
b. Collaborate with other national programmes – such as quality of care, infection prevention and control, patient safety, health workforce management, occupational and environmental health, emergency preparedness and response and other relevant programmes.
c. Consult with workers' and employers' representatives in the health system.
d. Organize national information campaigns to promote safe work practices and healthy behaviours among health workers.
e. Monitor and evaluate the implementation of the occupational health and safety programmes at subnational and facility levels.
f. Organize and manage, in collaboration with the national health information system, the collection of data and monitoring of trends in health, safety and well-being of health workers.
g. Develop and support the implementation of a programme for health surveillance of health workers.
h. Organize monitoring of the compliance of health facilities with the regulations and standards for occupational safety and health.
i. Advise, and where appropriate plan, the central procurement of supplies and commodities needed for occupational health and safety for health workers.
j. Liaise with the government department responsible for enforcement of occupational safety and health regulations regarding the compliance of health facilities with national laws and regulations.
k. Advise on, and where appropriate participate in, the central procurement of PPE, safer medical devices and vaccines for health workers.
l. Ensure effective and efficient use of resources for occupational health and safety for health workers through resource planning.

Responsibilities at the district [provincial, state] level

11. Every [district, provincial, or state] health management team shall designate a unit [officer] to supervise and guide the management of occupational health and safety in the health facilities located in the territory of the jurisdiction.

12. The [district, provincial, or state] unit [officer] in charge of occupational health and safety for health workers shall be responsible to:

    a. Oversee the establishment and functioning of the joint labour–management committees for health and safety at work in the health facilities.
    b. Oversee the designation and functioning of the focal points for occupational health and safety for health workers in all health facilities.
    c. Carry out audits of occupational health and safety in health facilities.
    d. Provide technical support to health facilities to ensure compliance with occupational health and safety regulations and relevant national guidelines and standard operating procedures, and liaise as appropriate with the authority responsible for enforcement of occupational health and safety regulations.
    e. Collaborate with other departments, local authorities and stakeholders – such as trade unions, professional associations of health workers, and employers in the health sector (e.g. hospital federations) for the promotion of occupational health, safety and well-being of health workers.
    f. Advise, and where appropriate oversee, the integration of measures for occupational health and safety in the building design, construction and reconstruction of health facilities.
    g. Identify training needs, plan and provide training in occupational health and safety for health workers.
    h. Plan and propose allocation of resources for implementation of occupational health and safety for health workers.
    i. Monitor and evaluate the implementation of occupational health and safety programmes in health facilities.
    j. Organize local campaigns to promote healthy behaviours and safe practices among health workers.
    k. Work with the managers of health facilities to promote a preventative culture and to encourage the reporting and investigation of incidents, occupational diseases and work accidents.
    l. Collaborate with community leaders to promote occupational health and safety of health workers in the community, including community health workers and traditional healers.

Responsibilities at the facility level

13. Notwithstanding the responsibilities of an employer under the [Occupational Safety and Health Act], the managers of health facilities shall:

    a. Develop, in consultation with workers' representatives, internal rules for occupational health and safety and well-being in the health facility and ensure that the rules are publicly displayed and that all workers are familiar with them.
    b. Designate a person to serve as a focal point for occupational health and safety for health workers in the health facility.
    c. Integrate measures for occupational health, safety and well-being into the overall management and the plans of action of the facility.
    d. Plan and allocate financial and human resources for protecting and promoting occupational health, safety and well-being.
    e. Implement measures for the prevention and control of occupational infections among health workers in accordance with the national guidelines for infection prevention and control.
    f. Encourage the reporting of incidents, occupational diseases and work accidents by workers in a blame-free environment.
    g. Plan, recruit (as appropriate), and manage human resources and organize the work and the procurement of commodities in a way that protects and promotes occupational health and safety.
    h. Develop a culture of prevention and respectful workplace standards and promote safe work practices and healthy behaviours among workers.
    i. Establish policies and measures for zero tolerance of workplace violence (verbal and physical abuse, including sexual harassment) in the health facility and take measures to protect the safety and security of health workers.
    j. Report annually to the district health management team on the measures taken to protect and promote occupational health, safety and well-being as well as on incidents, occupational diseases and work accidents registered in the health facility.
    k. Develop plans for emergency procedures and contingencies and for first aid.
    l. Collaborate with community leaders to promote occupational health and safety of health workers in the community, including community health workers and traditional healers.

14. Notwithstanding their responsibilities as employees under the [Act for Health and safety at Work], health workers shall:

    a. Report to the focal point for occupational health and safety for health workers all cases of exposure to blood and body fluids through sharps injuries, blood splashes etc. according to the guidelines for infection prevention and control, as well as cases of verbal abuse, sexual harassment and physical violence at the workplace or in relation to work.

b. Use appropriately their work clothes, uniforms, protective clothing and PPE according to the instructions given to them by the manager.

c. Cooperate with the management and participate in the measures for protecting their occupational health, safety and well-being.

15. Health workers have the right to remove themselves from a work situation that they have reasonable justification to believe presents an imminent and serious danger to their lives or health. When a staff member exercises this right, he or she shall be protected from any undue consequences.

Health and safety committees

16. Health facilities with more than XX permanent employees [use the number specified in national regulations for occupational health and safety] should establish a joint labour–management committee for health and safety at work.

17. The committee shall be composed of the manager or his/her representative, safety and health representatives of workers designated according to article XXX of the [Occupational Health and Safety Act], the facility focal points for occupational health and safety, infection prevention and control, human resources, and experts from the occupational health service, if applicable. The composition of the committee and the frequency of its meeting shall be specified in the facility occupational health and safety policy.

18. The committee shall lead the implementation of the facility occupational health and safety policy and shall investigate cases of incidents, occupational diseases and work accidents as well as the complaints of workers on matters of occupational health and safety.

Occupational health services

19. Health facilities with more than XX permanent employees should organize the provision of occupational health services by providers approved by the [ministry responsible for health] and staffed with adequate personnel with technical competency in the area of occupational health.

20. Occupational health services shall provide support to the facility manager to carry out regular workplace risk assessments, to participate in the selection of new equipment, tools and working methods, to carry out pre-placement, periodic and exit medical check-ups of workers, to carry out vaccinations and post-exposure prophylaxis, to provide training of workers and instructions in health and safety at work, and to provide primary health care of health workers.

21. Pre-service and ongoing immunizations against hepatitis B and other vaccine-preventable diseases in the workplace shall be provided to all health workers at risk with no cost to the employees, ensuring all three doses of the hepatitis B immunization have been received by all workers at risk of blood exposure (including cleaners and waste handlers) according to [WHO guidelines, or the corresponding national guidelines].

22. Measures shall be implemented to ensure that all health workers have access to diagnosis, treatment, care and support for occupational infections, such as HIV, TB, hepatitis B and C and COVID-19, according to [WHO/ILO/UNAIDS guidelines or the corresponding national guidelines].

Social health protection of health workers

23. Health workers shall be provided with entitlement to compensation for work-related disability in accordance with the [Workers' Compensation Act of YYYY]. The facility focal points for occupational health and safety and/or the occupational health services shall collaborate with the employer in submitting the reports to the authority responsible for workers' compensation of the cases with occupational diseases and work accidents.

24. Health workers should be provided with universal health coverage and health insurance according to [specify applicable regulations for the different categories of health facilities, both public and private].

Medical surveillance of health workers

25. All health workers should be covered by medical surveillance with the purpose of:

    a. Assessing the health status of the worker at pre-placement, during and after employment.
    b. Determining the health status of the worker before transfer to another work area.
    c. Determining the employment position of a health worker within an organization.
    d. Ensuring that those who have had occupational medical conditions or exposures receive care sufficiently early to prevent any complications.
    e. Providing information that would help in determining and justifying a worker's compensation.
    f. Providing anonymized data for future epidemiological studies related to workers health and safety.
    g. Monitoring health workers exposed to occupational hazards for early detection of adverse health effects.

26. The medical surveillance shall include:

    a. Pre-employment and pre-placement medical examination to ensure that the worker is fit to undertake the job without risk to him/herself or his/her colleagues and to define the initial health status. Pre-placement medical examination is required before transfer or placing a worker on hazardous work.
    b. Periodic medical examinations that are conducted to identify possible health effects of work and health conditions that require modification of the workplace or work organization of the health worker.
    c. Return to work/post-sickness absence examination to ensure that a worker who has been absent with a medical condition for a considerable length of time is fit to undertake his/her usual job, and to facilitate the rehabilitation or

temporary or permanent resettlement of those who are not fit to return to their usual occupations.

d. Exit medical examination to identify possible diseases and injuries acquired during employment in the health facility.

27. Diseases acquired by health workers as a result of or in the course of their work activities shall be notified as follows:

    a. Cases of tuberculosis, HIV, hepatitis B and C, COVID-19, cholera and other communicable diseases among health workers shall be investigated and notified under the [Public Health Act].
    b. Cases of occupational diseases and injuries among health workers according to the national list of occupational diseases should be notified to the [Workers' Compensation Authority/Employment Injury Insurance].

28. Specific measures shall be taken at all levels to encourage and create a blame-free environment for workers to report to their immediate supervisor:

    a. Exposure to blood and body fluids, sharps injuries, blood splashes etc. according to the guidelines for infection prevention and control.
    b. Verbal abuse, sexual harassment and physical violence at the workplace or related to work, and attacks on health workers.
    c. Situations that they feel may be dangerous for their health and safety.

Training and education

29. The members of the joint labour–management committee for health and safety at work and the focal points for occupational health and safety in health facilities should be trained in workplace improvement in health services for at least XX contact hours, followed by refresher courses every X years.

30. Occupational health and safety shall be included in the curricula of undergraduate and postgraduate training in medicine, nursing and midwifery, environmental health, dentistry, pharmacy and other health and allied health professions.

Risk assessment and controls

31. Health facilities should carry out regular (at least once a year) risk assessments of all workplaces, bearing in mind gender-specific aspects and the needs of vulnerable workers, including those with disabilities. Risk assessments should also be carried out when new workplaces, workstations, work processes and work organization plans are introduced.

32. The workplace risk assessment should identify existing or potential occupational hazards, the level of their control and its effectiveness, and should result in recommendations for improvement.

33. The risk assessment should be carried out by the focal point for occupational health and safety with participation of members from the joint labour–management

committee for health and safety at work. The results of the risk assessment should be documented and submitted to the health facility manager and the joint labour–management committee for health and safety at work.

34. Health workers shall report forthwith to their immediate supervisor any situation that they have reasonable justification to believe presents an imminent and serious danger to their life or health. Until the employer has taken remedial action, if necessary, the employer cannot require workers to return to a work situation where there is continuing imminent and serious danger to life or health.

Monitoring of performance at facility, subnational and national levels

35. The performance on occupational health and safety in the health system shall be measured and monitored through the collection of data and trends on the following indicators [adapt to the country specific context]:

a. Indicators at facility level (on an annual basis)

- Number of reported incidents with blood exposure (blood splashes, needle-sticks and sharps injuries).
- Number of reported incidents with violence (physical, verbal, sexual harassment).
- Number of cases with sickness absence due to low back pain and days lost.
- Number of reported work accidents.
- Number of reported cases with suspected occupational diseases, such as TB, hepatitis B and C, COVID-19 and other occupationally acquired infections, low back pain, latex allergies and other diseases [according to the ILO list of occupational diseases, 2010, or specify the applicable national list of occupational diseases].
- Number of cases requiring post-exposure prophylaxis (for HIV and hepatitis B and C virus).
- Existence of the facility joint labour–management committee for health and safety at work and number of meetings.
- Number of preventive medical examinations of health workers.
- Existence of the focal point for occupational health and safety for health workers.
- Number of walk-through surveys (risk assessments carried out).
- Funds spent on occupational health and safety (human resources, training, safety equipment, PPE, information materials etc.).

b. Indicators at district level (on an annual basis)

- Number of health facility inspections covering occupational health and safety.
- Number of training courses on occupational health and safety for health facilities (focal points for occupational health and safety and members of the committee for health and safety at work).

- Number of health workers trained in occupational health and safety.
- Funds spent on occupational health and safety (human resources, training, safety equipment, PPE, information materials etc.).
- Number of health facilities with appointed focal point for occupational health and safety for health workers.
- Number of health facilities with more than XX permanent employees with established joint labour–management committee for health and safety at work.

c. Indicators at national level

- Proportion of health facilities with more than XX permanent employees with an established joint labour–management committee for health and safety at work.
- Proportion of health facilities with appointed focal points for occupational health and safety for health workers.
- Proportion of health facilities covered with inspection on occupational health and safety by district health officers and occupational health and safety inspectors.
- Incidence of incidents with blood exposure (e.g. blood splashes, needle-sticks and sharps injuries) – number of reported cases per 1000 health workers.
- Incidence of work incidents with violence (i.e. physical, verbal, sexual harassment) – number of reported cases per 1000 health workers.
- Incidence of sickness absence due to low back pain – number of cases of sickness absence due to low back pain per 1000 health workers.
- Incidence of work accidents – number of reported work accidents per 1000.
- Incidence of occupational diseases – number of registered occupational diseases per 1000 health workers.
- Total number of health workers trained in occupational health, safety and well-being in health facilities.
- Number of meetings of the national Steering Committee for occupational health and safety for health workers in the health sector.
- Proportion of health workers covered with preventive medical examinations.
- Total number of cases of post-exposure prophylaxis (e.g. HIV exposure).

Transitional provisions and implementation

36. This policy guideline should enter into force on [date]. The measures shall be implemented as follows:

a. At the national level – within [one] year.
b. At the district level – within [two] years.
c. At the facility level – within [three] years.

37. The ministry of health will issue the guides and the standard operating procedures for implementation of this policy and will organize the training of district and facility officers for occupational health, safety and well-being.

38. The ministry of health, in collaboration with national stakeholders, shall organize awareness-raising and information campaigns among health workers about this policy and about the preventive culture and respectful workplaces.

39. The ministry of health shall collaborate with the ministry responsible for labour [and the ministry responsible for local authorities] in order to develop a plan of implementation of this policy.

40. The measures for occupational health and safety of health workers shall be included in the Performance Assessment and Facility Rating Tool.

41. The priorities for improving occupational safety and health for health workers should be included in the national strategies for health workforce management and quality and safety of care [quality of care, patient safety, infection prevention and control].

Occupational health and safety programmes aim to prevent diseases and injuries arising out of, linked with or occurring in the course of work, while improving the quality and safety of care, safeguarding the health workforce and promoting environmental sustainability in the health sector.

This guide provides an overview of the key elements of occupational health and safety programmes for health workers at national, subnational and facility levels, as well as advice for the development and implementation of such programmes.

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