



THE REPUBLIC OF UGANDA  
Ministry of Health

# **Guidelines for Occupational Safety and Health, Including HIV in the Health Services Sector**

February 2008



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*Adapted from the Draft Workplace Safety and Health Guidelines.  
Ministry of Health of Mozambique and Jhpiego. 2007*

February 2008

## Foreword

The environment where health workers normally provide prevention, treatment, care and support services is rife with different kinds of hazards, including biological, physical, chemical, ergonomic and psycho-social. Implementation of good safety, health and environmental practices is an important prerequisite for productive and decent work. Whereas objective data is scanty on the magnitude of workplace incidents and accidents within the health sector, anecdotal information suggests that it is indeed a significant problem. The Ministry of Health is obliged to put in place policies and guidelines that uplift safety and health within the workplaces, including an appropriate response to HIV and AIDS as a workplace hazard. Furthermore, the Ministry is under obligation to report all workplace accidents and incidents that occur within the sector to the ministry responsible for labour in the country.

The Ministry has developed the national Policy for occupational safety and health within the health services sector that fulfils the purpose of reinforcing the principle of decent work by promoting workplace-related safety and health for all workers within the sector. These Guidelines were developed to provide the framework for operationalisation of the national Policy on occupational safety and health. The focus is on prevention of incidents and accidents at all workplaces; effective management of all incidents as well as exposures; and provision of rehabilitation and support to workers who get injured at the workplaces. Whereas the resource implications of putting in place and implementing effective workplace safety and health programmes is likely to be quite high for the sector, it will be important to mobilise and commit resources because the cost of management as well as compensation of workplace-related events is likely to be even much higher.

These Guidelines target all health workers at the different levels of the health care delivery system and apply to both the formal and informal workplaces within the health sector. This document covers the basic principles that are required to ensure workplace safety and health including hazard identification, risk management, prevention and management of exposures and incidents. In addition, it gives a comprehensive coverage of the management of HIV and AIDS as a workplace hazard within the health sector as well as some other common hazards such as tuberculosis, hepatitis and viral haemorrhagic fevers. Furthermore, the Guidelines provide a strategic framework for making a workplace safety and health programme fully operational. It will definitely be a useful resource for managers, supervisors and health workers at all levels during the planning, implementation, monitoring and evaluation of workplace safety and health programmes. I strongly urge all the partners and stakeholders to make use of this important document.

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## Acronyms

AIDS	Acquired Immune Deficiency Syndrome
BCC	Behaviour Change Communication
CBO	Community-Based Organisation
CME	Continuing Medical Education
DHT	District Health Team
FBO	Faith-Based Organisation
HBIG	Hepatitis B Immuno-Globulin
HBV	Hepatitis B Virus
HCT	HIV Counselling and Testing
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
HRH	Human Resources for Health
HSSP	Health Sector Strategic Plan
IEC	Information, Education and Communication
ILO	International Labour Organisation
IV	Intravenous
LD	Labour Department
MDRTB	Multi-Drug Resistant Tuberculosis
MoGLSD	Ministry of Gender, Labour and Social Development
MoH	Ministry of Health
MSD	Musculo-Skeletal Disorders
NGO	Non-Governmental Organisation
OPD	Out-Patients Department

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OSH	Occupational Safety and Health
PEP	Post Exposure Prophylaxis
PMTCT	Prevention of Mother-to-Child Transmission of HIV
PPE	Personal Protective Equipment
SHE	Safety, Health and Environment
STI	Sexually Transmitted Infections
TB	Tuberculosis
UNMHCP	Uganda National Minimum Health Care Package
VHF	Viral Haemorrhagic Fever
WHO	World Health Organisation

## Definitions

**Antiretroviral treatments:** The range of medications prescribed to attack and destroy the viruses in order to keep the quantity of viruses within the body as low as possible.

**Assessment:** An investigation, which must be agreed by all managers, that is made to identify the hazards facing an organisation and/or community.

**Commuting accident:** An accident resulting in death or personal injury occurring on the direct way between the place of work and:

- the worker's principal or secondary residence; or
- the place where the worker usually takes a meal; or
- the place where the worker usually receives his or her remuneration.

**Dangerous occurrence:** A readily identifiable event as defined under national laws and regulations, with potential to cause an injury or disease to persons at work or to the public.

**Ergonomics:** Refers to the practice of designing equipment and work tasks to conform to the capability of the worker.

**Exposure:** Refers to percutaneous injury (e.g. needle stick or cut with a sharp object) or the contact of mucous membrane or non-intact skin (e.g. exposed skin that is chapped, abraded or afflicted with dermatitis) with blood, tissue or other body fluids that are potentially infectious.

**Hazard:** Refers to the inherent potential of an activity, substance or situation to cause injury or to damage people's health, or to result in loss of property.

**Health services:** All infrastructures and settings involved in the provision of general and specialised health care to patients or support services such as public and private hospitals, nursing and personal care facilities; blood collection services, home health care services; private clinics by doctors, dentists and other health professionals; medical and dental laboratories; occupational health services; dispensaries, funeral homes and maternity care services.

**Health worker:** Any person whose activities involve contact with patients, with blood or other body fluids from patients such as the professional health worker, public safety worker, emergency response personnel, health care waste worker, students on training, first-aid provider.

**Occupational accident:** An occurrence arising out of, or in the course of work which, results in fatal or non-fatal injury.

**Occupational disease:** A disease contracted as a result of an exposure to risk factors arising from work activity.



**Occupational injury:** Any personal injury resulting from an occupational accident.

**Post-exposure prophylaxis:** The immediate provision of medication following an exposure to potentially infected blood or other body fluids in order to minimise the risk of acquiring infection.

**Reasonable accommodation:** Any modification or adjustment to a job, working hours or the workplace, which is reasonably practicable and will enable a person living with some illness or disability to have access to or participate or advance in employment.

**Risk:** Describes the combination of the likelihood of an occurrence of a hazardous event and the severity of the injury or damage that the event causes to the health of people or property.

**Working environment:** All places of work as well as all sites and areas where work is carried out including not only the permanent, indoor, stationary places of work which immediately come to mind, such as, offices and shops but also temporary places of work such as civil engineering sites, open-air places such as fields, forests, roads; and mobile places of work such as cabs of trucks, seats of tractors and excavators, and so on without exception; places where workers are found as consequence of their work (including canteens and living quarters around courts).

**Workplace:** Any health care facility, including hospitals, health centres, clinics, community health posts, rehabilitation centres, long-term care facilities, general practitioners' clinics; and any place where services are performed outside the health care facility such as ambulance services, home care, outreach services, etc.

## 1: Background

### 1.1. Introduction

All types of work are hazardous and persons at work are exposed to situations that may result into injury, disease or even death. While the economic cost is high, public awareness of safety and health tends to be quite low. All too frequently the subject does not get the priority it merits and the health sector is no exception. Workplace refers to any situation or location where an individual is involved in meaningful employment to earn a living. It covers both the formal places such as health facilities and offices; and the informal places such as the home, when health workers go to provide outreach services. The health sector is loaded with a wide variety of situations where health and safety issues are crucial. It also has a wide range of staff categories, which creates a variety of hazards and exposure that could lead to an increase in workplace related risk.

The implementation of good safety, health and environmental practices is essential in improving productive and decent work while at the same time reducing expenditure. The progressive integration of health and safety principles into the workplace organisation is a fundamental pre-requisite for the reduction of occupational injuries and diseases. The essential pillars of an effective strategy on occupational safety and health include: building and maintaining a preventive safety and health culture where the principle of prevention is accorded the highest priority; introduction of a systems approach to safety and health management; ensuring that the right to a safe and healthy working environment is respected at all levels; and active participation by the management and the staff in securing a safe and health working environment.

The *Occupational Health and Safety Act No 9, 2006* and the *Worker's Compensation Act 2000, Cap 224* require that all cases of workplace accidents and incidents be formally reported to the Ministry of Gender, Labour and Social Development (MoGLSD). The Health Sector has developed and put in place the Policy for occupational safety and health. The Sector therefore, requires guidelines for standardisation of workplace safety and health, including responding specifically to HIV as a workplace hazard. This document is broadly divided into five chapters: the first comprises of Background information that includes the magnitude of workplace accidents and incidents as well as the justification for these guidelines. The second chapter addresses the basic principles and interventions that are considered essential for the sector's workplace safety and health. The third chapter deals with management of HIV and AIDS as a specific workplace hazard while the fourth chapter covers management of the other common hazards that exist at the health workplace. The final chapter deals with implementation of a workplace safety and health programme, including the aspects of monitoring.

### 1.2. Magnitude

Safety and health at the workplace has improved in the developed countries over the past 20 to 30 years. However, the situation in developing countries is largely unclear because of inadequate accident and disease recognition, record-keeping and reporting mechanisms. It

is estimated that at least 250 million workplace accidents occur annually world-wide. It is further estimated that up to 335,000 of the accidents are fatal; and the majority of these are in the developing countries. The inadequate record-keeping and reporting mechanisms within developing countries implies that the figures could be even much higher.

In Uganda, there have been recollections of occupational injuries and diseases among the health workers. However, most of those injuries and diseases are not reported to the appropriate authorities as required by the *Occupational Health and Safety Act No 9, 2006* and the Worker's Compensation Act 2000. The available records show that there are only 39 health worker claims for compensation and all of these were victims of the Ebola outbreak of 2000.

### 1.3. Justification

The health sector has a wide range of occupational hazards that affect the different cadres of staff. The hazards include biological, physical, chemical, psycho-social as well as those associated with non-application of ergonomic principles. Over the last two decades the Human Immunodeficiency Virus (HIV) has presented a special challenge. The health sector specifically has borne the brunt of this epidemic, on one hand, it has increased the burden on the health system, which has to provide HIV-related care and on the other hand, the health care providers have also been infected either through sexual transmission or via accidental exposure while providing care to the people living with HIV. The productivity is declining while costs of medical care, recruitment and training are increasing as a result of HIV-related complications and mortality.

The sector is putting in place the guidelines for management of accidental exposure to HIV and hepatitis virus as part of the response to workers' safety and health. Nevertheless, with ever increasing workload due high turn up of patients, fear of infection and lack of safety equipment/supplies has resulted in enormous psychological and physical stress on the health workers. The overall capacity within the sector to deal with workplace safety and health is inadequate. In addition, there is no system to effectively handle reports of incidents and accidents that occur at the workplace.

The development of these guidelines is grounded on the fundamental rights of health workers to, among others: a safe and healthy work environment; non-discrimination and no stigma, including on the basis of HIV status; gender equality; social dialogue and expression of opinions related to workplace safety and health; post-exposure management including counselling and prophylaxis where appropriate as well as care and support in case of illness; confidentiality related to personal data; reasonable accommodation, such as job reassignment in case of illness; and continuing the employment relationship in case of illness, under appropriate conditions as long as they are medically fit.

Currently, there is no clear set of guidelines to be followed by the health manager on how to efficiently and systematically deal with the issues of safety and health at the workplace. This document addresses the basic principles and interventions that are important in order to deal with safety and health at the workplace for the health sector.

## 1.4. Scope

The Workplace Safety and Health Guidelines target all health workers at the different levels of the health care delivery system. It applies to national, regional, district, health sub-district as well as community level workplaces. It includes both the formal places such as health facilities or offices and the informal places such as the outreach services in the home or under a tree. It applies to all the health workers, their supervisors and managers at all levels of the health care delivery system. The purpose of the Guidelines is to reinforce the principle of decent work by promoting workplace related safety and health for all workers in the health sector.

### Goal

The overall goal of these guidelines is to provide a framework for the attainment of workplace safety and health for all workers within the health sector.

### Objective

The primary objective is to ensure safety and health for all the health workers by:

1. prevention of incidents and accidents at all the workplaces
2. effective management of all workplace incidents and exposures
3. provision of rehabilitation and support to all workers who get injured within the workplaces.

### Guiding Principles

The key to an effective occupational safety and health management is to apply sound principles, founded on experience to the problem at hand. The following is the summary of the underlying principles, which guide the development and implementation of the Guidelines.

1. **Competent planning:** The essence of effective preparedness and management is competent planning which takes into account the relation between occupational incidents and development. Consequently, it is necessary to require that Safety, Health and Environment (SHE) management plans be drawn at national, sectoral and district levels.
2. **Legitimate interests:** Respect for legitimate interests is pivotal in creating justice and therefore support for the exercise. Correspondingly, all affected parties have a legitimate interest in the choices among planning alternatives.
3. **Participatory approach:** All-important decisions should be made and taken with the participation of the affected persons and local communities concerned. It is therefore necessary to ensure involvement of staff as well as the relevant community members in the process.

4. **Consideration of all concerns:** For a comprehensive approach, it is necessary to take into account all concerns. Consequently, a representative choice of participants will ensure that all concerns of various elements of the community have been catered for.

#### Strategies

- Enhance/strengthen compliance to health and safety regulations/legislation
- Strengthen information, education and communication (IEC)
- Establish reporting mechanism of accidents, injuries, nosocomial infections etc.
- Manage the workplace injuries
- Monitor and evaluate the programme.

#### Activities

- i. Advocate for carrying out of risk assessment at all workplaces within the health sector
- ii. Carry out regular occupational and safety inspection of workplaces in the health sector
- iii. Train all health workers and managers in occupational safety and health at workplaces within the health sector
- iv. Develop and disseminate IEC materials on safety and health at workplaces within the health sector
- v. Institute a comprehensive compensation and rehabilitation programme for injured workers
- vi. Develop and maintain data collection and reporting system on occupational safety and health in the health sector.

### 1.5. Legal and Policy Framework

At the global level, the Guidelines are aligned to the International Labour Organisation (ILO) Conventions and the World Health Organisation (WHO) Resolutions on Occupational Safety and Health. Its existence is derived from the Policy for Occupational Health and Safety in the Health Services Sector (2008), which in turn is based on the Occupational Safety and Health Act No. 9 of 2006. The basic foundation is the Constitution of Uganda, 1995 that has several Articles relating to the concept of decent work and entitlement to a clean, healthy work environment. The Guidelines are in line with the Workers' Compensation Act 2000; the National Gender Policy (1997); the National Health Policy (Sept. 1999) and the second Health Sector Strategic Plan (HSSP II 2005/6 – 2009/2010); as well as the Human Resources for Health Policy (April 2006). The section on HIV at the workplace was developed on basis of the draft Uganda National AIDS Policy (July 2005); Draft National Policy on HIV/AIDS and the World of Work (Dec. 2003) and the draft Public Service HIV/AIDS Policy (Nov. 2004).

The parent Act clearly states that the responsibility of every employer is:

1. to take as far as is reasonably practicable all measures for the protection of all health workers and the general public from the dangerous aspects of health service delivery, at the employer's own cost
2. to ensure as far as is reasonably practicable that the working environment is kept free from any hazard by:
  - i. employing technical measures applied to new facilities or processes in design
  - ii. installation or addition to the existing facility or processes
  - iii. putting in place supplementary organizational measures.

In line with this responsibility, the Ministry has put in place these guidelines, which includes the institutional framework and a plan to address the safety, health and environment situation in the sector.

## 2: Workplace Safety and Health

### 2.1: Introduction

The promotion of workplace safety and health in the health sector will yield benefits in the form of reduction in sickness-related costs and an increase in productivity. Consequently, promotion of workplace safety and health within the health sector is a strategy that is aimed at preventing ill health at work (including work-related disease, accidents, injuries, occupational disease and stress) and enhancing the health-promoting potential and well-being of the workforce.

This chapter defines 'hazard' and gives some examples of common hazards that exist in the health workers' environment. It also provides a definition of 'risk' and the measures that can be taken to reduce risk at the workplaces. Thereafter, there is discussion of the basic principles that can be employed to prevent occupational infections and illnesses as well as those that are important for management of exposures and incidents.

### 2.2: Hazards in Health Workers' Environment

The term 'hazard' refers to the inherent potential of an activity, substance or situation to cause injury or to damage people's health, or to result in loss of property. While health facilities provide good and beneficial services to the community, they can also generate risks to the safety and health of service providers as well as their clients. Often, health facilities are work environments that utilize complex infrastructure and work processes that are associated with hazards. Workplace hazards are divided into two broad categories: **health hazards** and **safety hazards**.

#### 2.2.1. Health Hazard

This refers to any agent, situation or condition that can cause an occupational illness. It may produce serious and immediate (acute) effects or long-term (chronic) problems that affect all or only part of the body. Someone with an occupational illness may not recognise the symptoms immediately, for instance detection of noise-induced hearing loss is often difficult for the victims, until it is advanced. There are five types of health hazards:

- a) **Biological hazards:** e.g. bacteria, viruses, fungi and parasites acquired directly from the patients, working environment or through handling infected waste products
- b) **Physical agents:** e.g. needle-stick injuries; ionising and non-ionising radiation; assault and violence such as in mental clinics; heat from boilers and autoclaves; air pollution like in the mortuary and laboratories; vibration and noise
- c) **Chemical hazards:** e.g. pharmaceutical products such as drugs, antiseptics, anaesthetic agents; laboratory reagents, solvents, cleaning agents etc
- d) **Workplace design hazards:** Ergonomic hazards are associated with musculo-skeletal injuries/illnesses e.g. lifting of patients, combinations of forceful exertions, constrained poor postures and long duration/continuous work. Others include the

poor infrastructural and environmental design such as lighting, heating and ventilation; poorly placed drainage channels; slippery floors, absent walk-ways etc

- e) **Psycho-social hazards:** e.g. mental stress, harassment, violence, working alone; drug and alcohol abuse; inadequate remuneration etc.

### 2.2.2. Safety Hazard

This refers to anything that could cause an injury to a person whenever the workplace controls are not adequate. The injury caused such as a bruise, cut or fracture, is usually obvious. Examples at the health workplace include:

- a) slipping/tripping hazards such as slippery floor, electrical cords across floors, obstructions
- b) lack of proper personal protective equipment (PPE) resulting in blood splashing on the face, needle-stick injury, surgeon cutting him/herself
- c) pressure systems such as the steam boilers and autoclaves resulting in steam scalds
- d) lifting of patients, heavy things and other manual handling operations
- e) fire and explosion hazards
- f) vehicles such as the ambulances
- g) workplace violence e.g. in the mental clinics and in the process of enforcing law.

## 2.3: Risk Management

Risk describes the combination of the likelihood of an occurrence of a hazardous event and the severity of the injury or damage that the event causes to the health of people or property. The process of risk management includes **hazard identification, risk assessment** and **risk control**. The measures to control risk should be undertaken in a hierarchical order that is based on the effectiveness in eliminating the risk, preventing exposure or preventing injury.

### 2.3.1. Hazard Identification

(i) **Look for the hazard** while taking note that some may be measurable, in which case you refer to the established standards, while other hazards can't be quantified. Hazard identification is done through:

- a) Inspection of the workplace using the checklist (see Annex 2)
- b) Reviewing the accident, incident and ill-health records
- c) Conducting a walk-through survey
- d) Asking the workers or their representative on the hazards they encounter
- e) Following the manufacturers' instruction/ safety data sheets.



- ii) **Decide who might be harmed and how:** Think about the group of people doing similar work or who might be affected, e.g. cleaners, nurses, doctors, midwives, laboratory staff, radiology staff, clients etc. Pay particular attention to young persons; persons with disabilities; inexperienced workers and lone workers.

### 2.3.2. Risk Assessment

After identification of the hazard, carry out risk assessment to determine the level and nature of risk of exposure to the hazard; and to determine the measures required to eliminate the hazard or minimize the risk factors. The following issues should be taken into consideration:

- Modes of transmission for biological hazards
- Type and frequency of exposure to the hazard
- Factors that influence exposure and its recurrence such as workplace layout, work and clean-up practices; availability, adequacy and use of personal protective equipment
- Knowledge and training of health workers and their supervisors
- Capacity for use of any equipment to increase or reduce risk of exposure.

- iii) **Evaluate the risk** and decide whether existing precautions are adequate or more needs to be done to reduce the risk.

- a) Consider how likely it is that each hazard could cause harm. The likelihood that the harmful event will occur can be grouped in the following categories:
- i. High/almost certain
  - ii. Moderate
  - iii. Low
- b) Determine severity of the consequences if the hazardous event occurred, which can fall into three categories:
- i. **Minor:** results in minor injury or illnesses that do not cause disability (e.g., superficial injuries, minor cuts and bruises; eye irritation from foreign object)
  - ii. **Moderate:** results in serious injury or short-term and fully reversible illness/disability (e.g., lacerations, burns, concussion, serious sprains, minor fractures)
  - iii. **Major/Catastrophic:** results in permanent illness or injury/disability; and/or death (e.g., amputations, major fractures, poisonings, multiple injuries, fatal injuries, occupational cancer, other severe life shortening diseases; acute fatal diseases).

Then decide for each significant hazard whether the risk is low, medium or high. The table below illustrates a simple way to evaluate risk by comparing the relationship between likelihood that harm will occur and severity of the event's consequences.

**Table 1: Risk Characterisation**

Likelihood	Consequences		
	Minor	Moderate	Major/Catastrophic
Low	Very low risk	Low risk	Moderate risk
Moderate	Low risk	Moderate risk	High risk
High/almost certain	Moderate risk	High risk	Unacceptable risk
<b>Actions:</b>			
<b>Very low risk</b>	No action is required and no documentary records need to be kept		
<b>Low risk</b>	Manage using the routine procedures that includes monitoring		
<b>Moderate risk</b>	Establish fully designed procedures that include measures to reduce the risk		
<b>High risk</b>	Institute immediate preventive and/or corrective action; and carefully designed/closely monitored operating procedures		
<b>Unacceptable risk</b>	Do not start or continue work until the risk has been reduced		

- iv) **Record the findings:** If the workplace has more than 5 employees, you should record the findings of the assessment and the precaution(s)/risk reduction measure(s) that have been instituted. This is vital for easy reference and in monitoring and evaluation of the risk control measures.
- v) **Review the assessment and revise if necessary:** After risk reduction measures are put in place, check how the measures are working and introduce any necessary corrections or modification to the plans executed. Use the information and data from accident, incidents, injury and ill-health reports, as well as from inspections. In other words, risk management is a continuous process that has to be consistently implemented in health facilities.

### 2.3.3. Risk Control

The goal of risk control is to follow the hierarchy of controls, selecting the most effective measures in order of priority for their effectiveness in eliminating risk; minimising exposure by the health workers to the hazard; or preventing injury/illness resulting from the exposure.

#### a. Eliminate the hazard

Complete removal of the hazard from the facility infrastructure or operating procedures is the most effective risk control measure. For instance, the elimination of all unnecessary injections and replacement with oral medications of similar efficacy; elimination of some syringes and needles by use of jet injectors and needleless IV systems; and the elimination of unnecessary sharps such as towel clips.

**b. Substitute the hazard**

Where elimination is not possible, the hazardous element or procedure can be substituted with others that present less risk. For instance substituting a less toxic chemical for disinfection such as paracetic acid for glutaraldehyde; replacing hand-washing of surgical instruments by machine washing.

**c. Use engineering controls**

These controls either isolate or remove the hazards from the workplace and include interventions to prevent exposure to the health worker. Examples include:

- i. Making modifications to the infrastructure or equipment in order to make them safer, for instance protect the walls of x-ray rooms with lead; construct perimeter fences
- ii. Using safety devices for disposal such as the sharps containers
- iii. Providing newer technology devices with safety features such as needles that retract, sheathe or blunt immediately after use
- iv. Addressing the ergonomic factors such as improved lighting, workplace maintenance and workstation layout; safe access by health workers, clients and patients including the disabled
- v. Isolating the hazard by creating a barrier around that hinders access and the possibility to cause harm to health workers, clients or the public. For instance construct a perimeter fence around the waste disposal area at a health facility
- vi. Conducting regular checks of instruments and equipment as well as processes and repairing or replacing as appropriate.

**d. Use administrative controls**

These refer to the workplace specific policies aimed at limiting exposure to the hazard and examples include:

- i. Application of standard precautions for biological hazards
- ii. Clear scheduling of changes, rotation or access to the risk areas
- iii. Training of every health worker when reporting for the first time to a new facility or assignment to include precautions and safety measures
- iv. Providing clear signage and labels with instructions to facilitate identification of hazardous materials and sites.

**e. Apply work practice controls**

These controls involve the development and adoption of workplace interventions that reduce exposure to hazards by addressing how work is conducted, thus protecting the health and improving confidence of health workers. Examples include:

- i. No recapping of needles within the health facility; placing of the sharps containers at eye-level and within arms' reach; and emptying of sharps containers before they are full

- ii. Establishing the means for safe handling and disposal of sharps devices before beginning a procedure
- iii. Not allowing food or drinks to be consumed in the laboratories and operating theatres.

**f. Use personal protective equipment (PPE)**

This risk control measure applies the principle of placing barriers and filters between the health worker and the hazard. It is important to ensure that a clear policy for their use is in place; the supplies are adequate and the equipment properly maintained. In addition, health workers should have easy access to PPE and be adequately trained on their use. Examples of PPE include the following:

- i. Non-porous waterproof dressings for health workers with abraded or broken skin
- ii. Sterile and non-sterile gloves made from latex, vinyl, waterproof leather and other puncture-resistant materials to be used when health workers are likely to come in contact with blood, body fluids and contaminated materials
- iii. Respiratory protection including masks for health workers conducting mouth-to-mask resuscitation
- iv. Plastic aprons, waterproof gowns, eye protection, fluid-resistant masks, overalls and over-boots for health workers who may be splashed or sprayed with blood.

**Note:** In some cases a combination of risk reduction methods must be used. For instance, in case of suspected active TB patients it will be essential to place them in rooms with negative pressure or individual rooms with good ventilation (engineering control) and the health workers must use adequate respirators (use of personal protective equipment).

## 2.4. Education on Workplace Safety and Health

- a) Conduct promotional activities, including provision of information and implementation of educational activities, aimed to raise the awareness and to strengthen decision-making skills of **health workers** on infectious exposures and other hazards.
  - i. **Provide basic information** on infectious exposures and other hazards to every new health worker within the first week of employment. Health facilities must have appropriate written informational materials for this purpose.
  - ii. **Conduct regular educational activities** related to infectious exposures and other hazards in the workplace. The information should be provided or written as part of the in-service, continuing medical education (CME) sessions.

- b) Conduct educational activities for **clients and the community**. The content of these educational activities should help clients understand the risks that exist in a health facility and provide information about infection transmission mechanisms:
  - i. Address how to reduce the risk of health facility transmission of infections (e.g. practising cough etiquette and hand-washing)
  - ii. Inform the clients on how to collaborate better with health facility staff to reduce risks of infection and other hazards
  - iii. Conduct the educational activities at the health facility and within the community in close coordination, wherever possible, with community leaders and organisations.

## 2.5: Prevention of Occupational Infections & Illnesses

Occupational infections and illnesses can be prevented through effective risk management that includes identification of the hazard, assessment of the risk and putting in place the appropriate measures for controlling the risk. The following section deals with how we can control the common hazards identified within the health care workplace. These include the biological, physical, chemical, ergonomic and psycho-social hazards.

### 2.5.1. Control of Biological Hazards

Biological hazards exist throughout all health care settings that include the airborne and blood-borne pathogens. The precautions to prevent transmission of infectious agents are in two tiers: **standard precautions** that constitute the primary strategy and **transmission-based precautions** that focus on patients who are known or suspected to be infected or colonised with infectious agents.

#### a) Standard Precautions

Standard precautions are designed to cater for **all** persons—staff, visitors and clients—regardless of whether or not they are infected. It is based on the principle that all blood, body fluids, secretions, excretions (except sweat), non-intact skin and mucous membranes may contain transmissible infectious agents. The standard precautions aim at reducing the risk of transmitting micro-organisms from known or unknown sources of infection (e.g., patients, contaminated objects, used needles and syringes, etc.) within the healthcare system. The key components of standard precautions are:

- a) **Consider every person** (patient or staff) as potentially infectious and susceptible to infection
- b) **Wash hands or use antiseptic rub** to prevent cross-contamination (person to person or contaminated object to person). You should wash hands after touching blood, body fluids, secretions, excretions and contaminated items; as well as immediately after removing gloves and between patient contacts. **Use antiseptic agents** for cleansing the skin or mucous membrane prior to surgery, cleaning wounds, or doing hand rubs or surgical hand scrubs.

- c) **Use personal protective equipment (PPE) and dressing** e.g. gloves, masks, goggles, face masks and gowns if splashes and spills of any body fluids (blood, secretions and excretions) are likely. Gloves should be properly applied or used, e.g. to handle soiled instruments and contaminated waste materials; to perform invasive procedures.
- d) **Use safe work practices** that include:
  - i. Good housekeeping, routine environmental cleaning
  - ii. Safe handling and disposal of sharps including injection equipment; avoid removal, manipulation, recapping, bending or breaking used needles by hand
  - iii. Thoroughly and routinely caring for furnishings in the patient care area
  - iv. Immediately cleaning blood spills
  - v. Placing the patients who contaminate the environment or can not maintain appropriate hygiene in private rooms
  - vi. Using the correct procedures for distribution of clean linen and the collection, handling, bagging, storage, transport and cleaning of used linen
  - vii. Processing instruments and other **items** after use by first decontaminating and thoroughly cleaning them. This should be followed by either sterilisation or high-level disinfection using the recommended procedures.
- e) **Use engineering design** to protect, e.g. putting guards, nets, chimneys etc as appropriate.
- f) **Safely dispose of health care waste materials and sharps** to protect those who handle them and prevent injury or spread of infection to the community.
  - i. Segregate/properly classify the waste: health care waste materials; sharps; plastics etc
  - ii. Transport and safely dispose on basis of the type/nature of waste.

## **b) Transmission Based Precautions**

Adopt other more specific precautions to prevent infections according to their mode of transmission. The three main categories of transmission-based precautions are **contact**, **droplet** and **airborne precautions**. These precautions are applicable where standard precautions alone do not completely interrupt transmission of the infectious agent(s).

### ***i) Contact Precautions***

Contact transmission is the most common route and these precautions reduce the risk of transmission of organisms from an infected or colonized patient through direct or indirect contact (See Figure 1). They are indicated for patients infected or colonized with enteric pathogens (hepatitis A or echo viruses), herpes simplex and hemorrhagic fever viruses and multi-drug (antibiotic)-resistant bacteria. You should also implement contact precautions for patients with wet or draining infections that may be contagious (e.g., draining abscesses, herpes zoster, impetigo, conjunctivitis, scabies, lice and wound infections).

**Figure 1: Contact Precautions**

Use in addition to Standard Precautions for a patient known or suspected to be infected or colonized with micro-organisms transmitted by direct contact with the patient or indirect contact with environmental surfaces or patient care items.

**PATIENT PLACEMENT**

- Private room; door may be left open.
- If private room not available, place patient in room with patient having active infection with the same micro-organism, but with no other infection (cohorting).

**GLOVING**

- Wear clean, non-sterile examination gloves when entering room.
- Change gloves after contact with infectious material (e.g., faeces or wound drainage).
- Remove gloves before leaving patient room.

**HANDWASHING**

- Wash hands with antibacterial agent after removing gloves, or use a waterless, alcohol-based antiseptic hand rub.
- Do not touch potentially contaminated surfaces or items before leaving the room.

**GOWNS AND PROTECTIVE APPAREL**

- Wear clean, non-sterile gown when entering patient room if patient contact is anticipated or patient is incontinent, has diarrhoea, an ileostomy, colostomy or wound drainage not contained by a dressing.
- Remove gown before leaving room. Do not allow clothing to touch potentially contaminated surfaces or items before leaving the room.

**PATIENT TRANSPORT**

- Limit transport of patient to essential purposes only.
- During transport, ensure precautions are maintained to minimize risk of transmission of organisms.

**PATIENT CARE EQUIPMENT**

- Reserve non-critical patient care equipment for use with a single patient if possible.
- Clean and disinfect any equipment shared among infected and non-infected patients after each use.

Adapted from: ETNA Communications 2000

**ii) Droplet Precautions**

These precautions reduce the risks for nosocomial transmission of pathogens spread wholly or partly by droplets larger than 5  $\mu\text{m}$  in size (e.g., *H. influenzae* and *N. meningitidis* meningitis; *M. pneumoniae*, flu, mumps and rubella viruses). Other conditions include diphtheria, pertussis (whooping cough), pneumonic plague and streptococcal pharyngitis (scarlet fever in infants and young children).

The precautions are simpler than for airborne because the particles remain in air only for a short time and travel only a few feet. Therefore, contact with the source must be close for a susceptible host to become infected. (See Figure 2)

### Figure 2: Droplet Precautions

Use in addition to Standard Precautions for a patient known or suspected to be infected with micro-organisms transmitted by large-particle droplets (larger than 5  $\mu\text{m}$ ).



#### PATIENT PLACEMENT

- Private room; door may be left open.
- If private room not available, place patient in room with patient having active infection with the same disease, but with no other infection (cohorting).
- If neither option is available, maintain separation of at least 1 meter (3 feet) between patients.



#### RESPIRATORY PROTECTION

- Wear mask if within 1 meter (3 feet) of patient.



#### PATIENT TRANSPORT

- Limit transport of patient to essential purposes only.
- During transport, patient must wear surgical mask.
- Notify area receiving patient.

Adapted from: ETNA Communications 2000

### iii) Airborne Precautions

The precautions below reduce the transmission of particles 5  $\mu\text{m}$  or less in size that can remain in the air for several hours and be widely dispersed (See Figure 3). Examples of micro-organisms spread wholly or partly by the airborne route include tuberculosis (TB), chicken pox (varicella) and measles virus. Airborne precautions are recommended for the patients with either **known** or **suspected** infections with these agents.

### Figure 3: Airborne Precautions



Used in addition to Standard Precautions for a patient known or suspected to be infected with micro-organisms transmitted by the airborne route.



#### PATIENT PLACEMENT

- Private room.
- Door closed.
- Room air is exhausted to the outside (negative air pressure) using fan or other filtration system.
- If private room not available, place patient in room with patient having active infection with the same disease, but with no other infection (cohorting).
- Check all visitors for susceptibility before allowing them to visit.



	<p style="text-align: center;">RESPIRATORY PROTECTION</p> <ul style="list-style-type: none"><li>• Wear surgical mask.</li><li>• If TB known or suspected, wear particulate respirator.</li><li>• If chicken pox or measles:<ul style="list-style-type: none"><li>- Immune persons—no mask required.</li><li>- Susceptible persons—do not enter room.</li></ul></li><li>• Remove mask after leaving the room and place in a plastic bag or waste container with tight-fitting lid.</li></ul>
	<p style="text-align: center;">PATIENT TRANSPORT</p> <ul style="list-style-type: none"><li>• Limit transport of patient to essential purposes only.</li><li>• During transport, patient must wear surgical mask.</li><li>• Notify area receiving patient.</li></ul>
<p><i>Adapted from:</i> ETNA Communications 2000</p>	

## 2.5.2. Control of Physical Hazards

### a) Needle-Stick Injuries

It is the most common source of occupational exposure to blood and the primary cause of blood-borne infections to health workers. The risk of transmission of infection through needle-stick injury to health workers is about 3-10% for HBV; 3% for HCV and 0.3% for HIV. The most frequent causes of needle-stick injury are two-handed recapping and the unsafe collection and disposal of sharps waste. Needle-stick injuries can be controlled by:

**Elimination of the hazard:** Substitute injections by administering medications through another route such as tablet, inhaler and trans-dermal patches. Substitute needles and syringes with jet injectors; and eliminate sharps such as towel clips; and use needleless intravenous systems.

**Engineering controls:** Devices that make needles retract, sheathe, blunt immediately after use.

**Administrative controls:** Put in place policies and consistent training programmes that aim at limiting exposure to the hazard, including application of universal precautions. Allocate and commit resources towards the safety programme.

**Work practice controls:** No re-capping; place sharps containers at eye level and within arms' reach; check sharps containers on a schedule and empty them before they are full; establish the means for safe handling and disposal of sharps devices before beginning a procedure.

### b) Radiation Exposure

This hazard is particularly relevant for health workers deployed in the Radiology departments and use both ionising and non-ionising radiation for diagnostic as well as therapeutic purposes. Radiation can not be sensed by the human being and current safety

regulations require that safety devices be built within radiation instruments to reduce accidental exposure. Ionising radiation causes most damage to rapidly growing, undifferentiated cells and hence special care should be taken by female workers who are or suspect that they are pregnant, especially during the first trimester. Radiation hazard can be controlled by:

**Engineering controls:** Increasing the shield between the health workers and the radiation source, for instance through use of lead-based shields in x-ray units.

**Substitution:** Use of non-ionising radiation such as ultra-sound in place of x-rays when appropriate.

**Administrative controls:** Reducing the time of exposure to the radiation source; Increasing the distance between the health worker and radiation source; Monitoring for evidence of radiation exposure to health workers through the personal radiation detection devices (TLD badges) that they wear.

**Use of PPE:** Wearing lead jackets and related personal protection equipment when appropriate.

### 2.5.3. Control of Chemical Hazards

Exposure to hazardous chemicals may produce a wide range of adverse health effects. The likelihood of adverse effects occurring and the severity of the effect are dependent on the toxicity of the chemical, route of exposure and the nature as well as the extent of exposure to that substance. There are three main routes of chemical exposure: inhalation, skin contact, and ingestion. Some examples of adverse effects include carcinogenicity (development of cancer); hepato-toxicity (liver damage); neuro-toxicity (nervous system damage); and nephro-toxicity (kidney damage).

#### *a) Medicines and other pharmaceutical products*

All medicines and other pharmaceutical products have side effects that could occur as a result of inhalation, ingestion or direct contact with the skin. Medicines can be hazardous to both the health worker and the patient. This hazard can be controlled by taking the following steps:

**Administrative control:** Ensure that the correct medicines are dispensed according to the prescriptions; and that the way for proper use was explained clearly to the patient.

**Work practice control:** Avoid dispensing medicines using the bare hands.

**Use of PPE:** Put on gloves, aprons and other appropriate personal protection equipment whenever handling medicines and other pharmaceutical products.

#### *b) Toxic chemicals*

Toxic chemicals are used within the health care setting for disinfection (glutaraldehyde, formaldehyde); as laboratory reagents, including for histology/pathology; and as general

anaesthetics. The chemicals often produce injuries at the site where they come into contact with the body. Irritant gases such as chlorine and ammonia can produce a localized toxic effect in the respiratory tract; corrosive acids and bases can produce a local damage to the skin. In addition, a toxic chemical may be absorbed into the blood stream, distributed to other parts of the body and produce systemic effects. The hazard from toxic chemicals can be controlled by:

**Engineering controls:** Use local exhaust ventilation when handling chemicals that can vaporise; Keep the toxic chemicals under a fume hood whenever possible.

**Work practice controls:** Use only enough chemical to perform the required procedure and properly seal all the containers; immediately clean up spills and wash gloved hands after handling the chemical; In case of skin or eye contact, wash immediately with water.

**Use of PPE:** Wear personal protective equipment such as goggles, masks and face shields; Use gloves and aprons made of nitrile or butyl rubber to avoid skin contact (latex gloves may not provide adequate protection).

#### 2.5.4. Control of Ergonomic Hazards

Ergonomics is the practice of designing equipment and work tasks to conform to the capability of the worker. It provides a means for adjusting the work environment and work practices to prevent injuries before they occur. When there is a mismatch between the physical requirements of the job and the physical capacity of the worker, work-related musculoskeletal disorders (MSDs) can result. Health care facilities have been especially identified as an environment where ergonomic stressors exist.

Many ergonomic hazards are the result of stressors that have not been effectively identified and addressed in a facilities safety and health program. In health care facilities many in-patients are totally dependent on staff members to provide activities of daily living, such as dressing, bathing, feeding, and toileting. Each of these activities involves multiple interactions with handling or transferring of patients and could result in employee injuries. Employee exposure to ergonomic stressors in healthcare workplaces occurs not only during patient handling tasks but also while performing other tasks in the kitchen, laundry, engineering and housekeeping areas of the facilities. The Table in Annex 3 presents examples of potential ergonomic hazards and the recommended solutions to address each one. The following general measures can be taken to control ergonomic hazards.

**Administrative controls:** Train all the health workers on ergonomic-related safety procedures.

**Work practice controls:** Minimize manual lifting of materials, patients or clients within the health facility and eliminate it completely whenever feasible.

**Engineering controls:** Improve access to the units within the health facility for trolleys and wheel-chairs; Use appropriate equipment for lifting materials, patients and clients; Use equipment with rolling devices to facilitate transfer from one position to another.

### 2.5.5. Control of Psycho-Social Hazards

#### *a) Addictive substances*

The abuse of substances such as alcohol or other addictive drugs like pethidine or morphine can result in impairment that constitutes an avoidable workplace hazard. Many of those who abuse alcohol and other drugs are in denial of their problem or do not recognise it in themselves; while others are concerned about being found out. Health workers with problems of substance abuse can be returned safely to the workplace provided they can access appropriate treatment and continued care services. Comprehensive control of this hazard includes doing the following:

**Administrative controls:** Establish Policy that helps everyone to understand that a drug-free workplace is more likely to be a safe and healthy environment. Train the supervisors to enable them maintain a healthy environment by evaluating and discussing health workers' performance without undue judgement or humiliation; educate the health workers to support a safe, healthy drug-free workplace environment.

**Work practice controls:** Utilise team building to foster a shared sense of responsibility and place the drug prevention programme in the context of workplace health; ensure that the confidentiality of affected workers is maintained; all staff should understand the drug-free policy and encourage others to deal with work-related problems that may be linked to substance abuse.

#### *b) Stress and Psychological Harassment*

Work-related stress is the response to **excessive** work demands and pressures that is not matched by the health workers' knowledge and abilities, and which challenge their ability to cope. The situation is made worse when the health worker feels that there is little support from the supervisors and colleagues and where they have little control over work or how to cope with its demands and pressures. Stress is a major challenge to health workers and could result in ill-health, poor motivation, less productivity and declined safety at work. Psychological harassment is present at many workplaces and is often caused by deterioration of interpersonal relations as well as organisational dysfunctions. It is related to a variety of factors including discrimination on basis of gender, religion, ethnicity, age and socio-economic reasons. Psychological harassment has the potential to cause or contribute towards psycho-pathologic, psycho-somatic and behavioural disorders. Interventions to control the hazards include:

**Administrative controls:** Have a workplace policy that promotes good management and work organisation; Train health workers and their supervisors on assertiveness, stress and time management; Have clear scheduling of changes and rotation for health workers assigned to the stress-prone units; Match the health worker's knowledge and abilities, as much as possible, to the needs of each job with provision of adequate supervision support.

**Engineering controls:** Improve the quality of equipment used at the workplace; improve the physical working conditions.

**Work practice controls:** Provide and promote recreational activities such as volleyball, netball, football; provide regular individual counselling support to health workers in stress-prone duty stations such as cancer wards, AIDS clinics, intensive care units etc.

## 2.6: Management of Exposures and Incidents

Prevention of exposure to hazards at the workplace is the primary strategy for reduction of occupationally acquired injuries. However, service delivery in the health sector will always carry a risk of exposure to biological, physical, chemical, ergonomic and psycho-social hazards. Some health workers may become infected or ill in spite of the implementation of preventive measures. It is within the rights of health workers to benefit from care, rehabilitation and workplace reinsertion if they are affected by disease or disability at the workplace. Such interventions reduce the loss of essential skills as well as experience and minimise disruption to the provision of care for clients. It is important to ensure that a system is in place to handle immediate care, counselling and treatment (where applicable) for the health worker. It should have a component for quick reporting and immediate response from the health facility manager that includes thorough investigation and appropriate management.

- i. Designate an appropriately trained person to be responsible for conducting the initial assessment, counselling and referral of exposed health workers who need follow-up. The service should be available during all working hours and throughout the week.
  - The designated person should be responsible for proper documentation of the event(s) and ensuring that the follow-up actions are completed. This should include the nature, circumstances and treatment given, which should all be presented to the Health Facility Manager.
  - Inform all health workers of the procedure and mechanism for contacting the designated person.
    - All medications for post-exposure prophylaxis e.g. antiretroviral drugs, hepatitis B vaccine, hepatitis B immunoglobulin (HBIG) should be always available on site for timely administration.
    - Health workers should immediately report any incident of occupational exposure in order to initiate early post-exposure prophylaxis where applicable.
    - All health workers should be familiar with the principles of post-exposure management as part of job orientation and continued medical education.
- ii. Follow the standard precautions for any first-aid treatment that may involve exposure to blood or body fluids.
- iii. Properly record and report all occupational exposures, injuries and diseases, in line with the Occupational Safety and Health Act 2006. This involves filling the LD 31 form that is available from the District Labour Office and headquarters of the ministry responsible for labour.

### 2.6.1. Early Diagnosis

The best way to limit the damage of an infection or illness is to diagnose it as soon as possible. Early diagnosis allows the prompt treatment of a medical condition and speeds recovery.

- i. Wherever conditions allow, conduct an **annual medical check-up**, which includes:
  - Medical history, assessment of health and communicable disease risks and immunization status
  - Clinical examination, including blood pressure monitoring, vision screening, and cervical cancer screening for women
  - Laboratory tests, including glycaemia.
- ii. Educate the health workers about the signs and symptoms of the most frequent illnesses at the workplace, such as TB, HIV, malaria, hypertension, and diabetes, and instruct them to report promptly for evaluation should these develop.
- iii. Conduct **periodic active screening** for health workers to identify symptoms of common occupational diseases such as tuberculosis. Carry out further evaluation of those found to have symptoms compatible with TB.
- iv. Ensure the availability of laboratory support with capacity to perform tests for common conditions such as TB (Acid alcohol fast bacilli - AAFB test); HIV, malaria (thick blood smear or rapid test); and blood glucose. This could be either directly at the facility or through an effective referral system.

### 2.6.2. Treatment and Rehabilitation

Health workers affected by illness should receive appropriate care and support so they can recover as quickly and completely as possible. Provide the necessary treatment and rehabilitation to the maximum extent possible, free of charge that includes:

- Diagnostic tests and professional care
- Hospitalization services if needed
- Drugs such as the anti-tuberculous, antiretrovirals and for management of opportunistic infections in case of HIV; anti-malarials etc.
- Nutritional counselling and supplements
- Rehabilitation, including physiotherapy and stress reduction
- Social support for health workers affected by disease and their families. These programs should include education on how to prevent the spread of infections at home and how to cope with the worker's disease or dependency. Social support can also include mechanisms for providing support to the families of workers who are affected by serious diseases.

- Compensation to the injured or diseased health worker in line with the **Workers' Compensation Act 2000; Cap 225**, which provides for redress in cases where there is permanent disability arising out of the workplace hazard.

The appropriate management of illnesses, including serious conditions such as TB or HIV, can dramatically improve the general health, life expectancy and quality of life of health workers making them productive for many years. Health workers affected by disease that responds to proper treatment, rehabilitation, and support must not suffer discrimination in terms of job security or opportunities for training or job advancement for as long as they are able to perform productively.

### 2.6.3. Workplace Reinsertion

The reinsertion of workers affected by illness to their jobs should follow the principles of reasonable accommodation. The managers should make administrative or practical adjustments to help the health workers with an illness or disability to manage their work. These adjustments can include:

- Rearrangement of working hours
- Modified tasks and jobs, including modifications in the case of HIV-positive workers who may be at risk e.g. avoiding exposing them to infectious TB patients, particularly multi-drug resistant tuberculosis (MDR TB) or pose a risk to patients by virtue of their performing invasive procedures. This precaution may also apply to workers with other infections such hepatitis B.
- Adapted working equipment and environment
- Provision of rest periods and adequate refreshment facilities
- Granting time-off for medical appointments
- Flexible sick leave
- Part-time work and flexible return-to-work arrangements.

The reinsertion of workers affected by infections or illness to their jobs must also take into account the health and safety of patients. Some restrictions may apply before infected or ill health workers can fully or partially return to work. The table in Annex 4 presents examples of work restrictions that must be followed in case of some common infections.

## 3: Management of HIV and AIDS in the Health Services Sector

### 3.1 Introduction

The Human Immunodeficiency Virus (HIV) is commonly transmitted through sexual intercourse from an infected individual to another. It can also be spread through injury with sharp contaminated instruments, through contaminated blood /blood products; and from an infected mother to her baby. Occupational infection mainly occurs via accidental injury with contaminated sharp instruments; and through direct contact with broken skin or mucous membranes of the eyes, nose or mouth.

The virus destroys the body's immune system thus rendering it unable to fight infection. There is usually a long period of up to 10 years after infection during which the person has no symptoms suggestive of HIV infection. Nevertheless, s/he is infectious and the virus can be detectable through antibody and antigen tests. As the virus continues to destroy the immune system, symptoms and signs that include opportunistic infections become more common. Without effective treatment, it progresses to Acquired Immune Deficiency Syndrome (AIDS), which develops when the immune system is severely damaged.

This chapter provides some of the answers to challenges that often face the human resource managers within the health sector in relation to HIV and AIDS. It includes a discussion of rights of health workers; the strategies for prevention of HIV; care and treatment as well as management and support for the infected health workers.

### 3.2. Rights of Health Workers

In line with the Public Service guidelines, all the health workers shall be entitled to the same rights and employment obligations, regardless of their HIV sero-status.

- Treat all health workers living with HIV with compassion and understanding.
- **Stigma and Discrimination:** HIV-related stigma and discrimination by health workers towards other health workers; towards patients; or by the managers and supervisors towards the health workers, undermine the provision of care as well as HIV related prevention interventions.
  - Prohibit HIV-related discrimination within the employment setting and in the exercise of professional responsibilities.
  - Provide comprehensive care that includes antiretroviral treatment to all HIV infected health workers to improve the quality of life.
  - Train all health workers at all levels on HIV and AIDS in order to increase their understanding. This will contribute to reduction in discriminatory attitudes towards colleagues and patients living with HIV.
- **Disclosure and Confidentiality:** Disclosure of HIV status by the health workers increases access to counselling, prevention and treatment services. In addition, it enhances



adoption of preventive behaviours and ensures appropriate deployment of the health worker at the workplace.

- Enable all health workers to have full control over decisions about whether, and how their colleagues are informed of their HIV status.
- Ensure that all health workers understand that they have a right to confidentiality and no obligation to respond if asked about their HIV sero-status by patients or their families.

➔ **Deliberate Transmission of HIV:** Make sure that all the health workers are fully aware of their responsibility to prevent further spread of HIV either through sexual relationships or via accidental exposure during the course of providing care to clients.

- Health workers who deliberately spread HIV are liable to prosecution and punishment if found guilty.

### 3.3. Prevention of HIV

➔ **IEC/BCC:** Information, Education and Communication (IEC)/Behaviour Change Communication (BCC) interventions are critical for the prevention of further spread of HIV.

- Ensure that IEC/BCC and training on HIV/AIDS is part of the induction programme for all new health workers and students.
- Adequately address ethical, gender and social dimensions of the management of HIV at the workplace.
- Conduct periodic re-training to maintain/update knowledge and skills.
- Provide information and training that is needed to maintain, update and improve the knowledge as well as skills of the health workers.
- Provide information and training for the managers and supervisors of health workers.
- Develop and disseminate appropriate IEC materials to the health workers.
- Increase awareness among the health workers of the risks of exposure to HIV and other blood borne pathogens
- Report any occurrences of exposure to HIV and other blood-borne pathogens

➔ **Standard Precautions:** HIV is a pathogen that can be transmitted through occupational exposure to blood, body fluids and contaminated sharp instruments.

- Prevent accidental exposure to HIV by all health workers within the workplace through adherence to the standard (universal) precautions of infection control.

➔ **HIV Counselling and Testing (HCT):** Knowledge of HIV status is the entry point into the continuum of comprehensive HIV prevention, care and support services that includes antiretroviral treatment.

- Encourage all health workers to know their HIV status. Provide specific HCT services that ensure confidentiality and are easily accessible to the health workers at the health facilities.
  - Avail HCT services to health workers before and during deployment at areas of high risk to themselves e.g. TB ward treating multi-drug resistant (MDR) patients.
  - Ensure that HIV testing is not taken as a requirement at the time of recruitment or as a condition for continued employment, promotion or for insurance purposes.
- ➔ **Management of Sexually Transmitted Infections:** Control and prevention of sexually transmitted infections (STI) is a strategic measure in the prevention of HIV. The prevalence of Herpes simplex type 2 is relatively high and it has been found to be highly associated with HIV transmission or acquisition.
- Avail accurate and up-to-date information to all health workers on prevention and control of STI, which includes provision and promotion of condom use.
  - Provide access to confidential and effective treatment for STIs to all infected health workers.
- ➔ **Condom use:** Abstinence from sex for those who are not married; and mutual faithfulness within a marriage setting after knowing each other's HIV status are the best options for reducing risk of HIV transmission. Nevertheless, correct and consistent use of condoms is associated with significantly reduced risk of HIV transmission.
- Health workers who can not abstain from sex or who opt for extra-marital relationships should be advised to use condoms as a strategy to reduce risk of transmission or acquiring STI including HIV.
- ➔ **Prevention of Mother-to-Child Transmission of HIV:** Mother-to-child transmission of HIV is virtually the only way that children under 2 years of age acquire the virus. It is possible to significantly reduce risk of transmitting the virus from infected mothers to their babies.
- Encourage all pregnant female health workers to take an HIV test.
  - Provide the comprehensive package for PMTCT that includes antiretroviral drugs to all HIV positive pregnant health workers.
  - Encourage the HIV positive health worker to disclose her status to the spouse and provide on-going counselling support to the couple.
  - Ensure that the HIV positive health worker and her family are linked to the chronic HIV-related care services that include antiretroviral therapy for those who are eligible.
- ➔ **Post Exposure Prophylaxis (PEP) for HIV:** In line with the *National Policy Guidelines on Post Exposure Prophylaxis for HIV, Hepatitis B and Hepatitis C (Nov. 2007)*, a written PEP protocol that clearly spells out the mechanism for its implementation should be

available at the health facility. In addition, all health workers should routinely undergo training on universal precautions and management of PEP.

- Access to the PEP provider and PEP therapy should be possible at all times, throughout the week. Apply the following principles in order to effectively handle accidental exposure to HIV by health workers within workplace.
  1. Provide immediate First Aid
  2. Report the incident
  3. Perform a risk assessment
  4. Provide counselling and testing for HIV
  5. Initiate PEP
    - Base the decision to initiate PEP on risk-benefit ratio: benefit should outweigh the risk of initiation
    - Base the ratio on factors such as risk assessment, consent, counselling and co-existing patient factors
  6. Provide follow up counselling and support.

### 3.4. Care and Treatment

➤ **Management of Opportunistic Infections:** HIV infection weakens the body's immune system resulting in the individual being prone to various opportunistic infections and conditions. Management of opportunistic infections is a central component of care and support for people living with HIV and AIDS.

- Ensure that all health workers who are known to be infected with HIV get prompt and effective management of any opportunistic infections or conditions acquired.

➤ **Co-trimoxazole Prophylaxis:** Co-trimoxazole has been found to be beneficial to people living with HIV by reducing the risk of pneumocystis pneumonia and other infections.

- Encourage all health workers known to be living with HIV to take co-trimoxazole for prophylaxis according to the doses and schedule outlined in the national guidelines.

➤ **HIV Treatment:** Antiretroviral treatment is an essential part of the comprehensive HIV care package that improves both quality and quantity of life.

- Conduct routine laboratory and/or clinical assessments (in line with the guidelines) for all HIV positive health workers to determine their eligibility for treatment.
- Provide confidential ART services to all the health workers who are eligible for treatment from within the health facilities.
- Consider starting treatment as early as possible due to the fact that the working environment of health workers is rife with biological hazards.

### 3.5. Management and Support

- **Gender-Related Issues:** Biological, socio-cultural and economic factors render women more likely to become infected with HIV. In addition, women tend to be more adversely affected by the consequences of the epidemic yet the health sector is a major employer of women.
  - Mainstream gender issues in all the health sector workplace HIV and AIDS programmes.
  - Avail accurate and updated information that alerts young women and explains their higher risk of being infected with HIV.
  - Educate both women and men on power relations in employment and personal situations, including harassment and violence.
  - Educate the men in order to promote their responsibilities regarding HIV prevention and the contextual factors that can facilitate responsible preventive behaviours.
  - Train the health workers to ensure understanding of the physical and psychological needs of HIV positive women, including the reproductive and child health-related needs.
- **Job Security and Promotion:** Health workers who are living with HIV are capable of remaining productive through appropriate HIV and AIDS management that include antiretroviral treatment for eligible persons.
  - Do NOT use HIV status as the basis for discrimination in terms either of job security or opportunities for training or promotion.
  - Minimise separation of health worker couples through posting/transfer.
  - Do NOT deploy health workers who are known to be living with HIV to places or locations within the health facility that are recognised to be hazardous to their health or to those of their clients.
  - Facilitate access to appropriate care and treatment that includes antiretroviral therapy to all health workers who are known to be living with HIV.
- **Reasonable Accommodation:** This refers to the administrative or practical adjustments that are made to help workers with an illness or disability to manage their work. Within the context of HIV infection, this should be seen as part of necessary care for the individual, and not as evidence of being more favourably treated.
  - Treat all health workers with AIDS that seek accommodation like workers with any other chronic illness in accordance to the national laws and regulations.
  - Grant special leave of absence in line with the provisions of the Government's Standing Orders.
  - The Responsible Officer can grant a full pay sick leave of up to ninety (90) days to the health worker living with HIV, on the recommendation of a Government Medical Officer, in any period of 12 months.

- The full pay sick leave can be extended to up to 180 days in any period of 12 months if the Director General of Health Services (or any Government Medical Officer designated by him) is satisfied that the health worker living with HIV will be fit to resume duty within a reasonable time.
  - The health worker living with HIV can initiate retirement on medical grounds, if s/he is unable to work.
- **Social Support:** Social support is an important part of the comprehensive HIV care package. It involves the individual and immediate family members.
- Link the HIV positive health workers to the existing social support structures such as the Networks of People Living with HIV/AIDS; NGOs, FBOs and CBOs.

## 4: Management of Other Specific Workplace Hazards

### 4.1: Introduction

The health care setting is full of different types of hazards that have been categorised under biological, physical, chemical, ergonomic and psycho-social. Whereas it is impossible to discuss all the important hazards that currently exist within the setting, an attempt has been made to prioritise and present a few examples. This chapter discusses some common hazards that currently exist at the workplace within the health care setting, such as tuberculosis, viral hepatitis, viral haemorrhagic fevers, fire, floods and violence.

### 4.2: Tuberculosis

Some health workers are at increased risk of acquiring TB in the workplace particularly those who work in facilities that diagnose and treat TB patients. Crowded clinics and wards increase the risk of transmission to both patients and health workers. The greatest risk of transmission occurs when patients remain undiagnosed and untreated. At increased risk are workers who have more frequent and direct patient contact; have longer duration of employment; have contact with TB patients who have not yet been diagnosed and placed on therapy; work in facilities with no infection control measures in place; and those who perform cough-inducing procedures on patients. The following measures can be taken to control the hazard:

#### Administrative controls

- Have clear written policy on TB infection-control plan to ensure prompt detection, airborne precautions, and treatment of persons who have suspected or confirmed TB disease.
- Ensure timely availability of results for all the investigations of suspected TB patients from the laboratory, x-ray etc, ideally within 24 hours.
- Train and educate health workers regarding TB, with specific focus on prevention, transmission and the symptoms/signs.
- Institute an annual TB screening programme for assessing and evaluating all health workers who are at high risk of TB infection that includes mantoux test, sputum examination and chest x-ray.
- Isolate/separate all patients with multi-drug resistant TB (MDR-TB) until sputum smear negative in addition to the two-week treatment and clinical improvement criteria.

#### Work practice controls

- Organise the clinic so that patients who may have infectious TB go to separate waiting areas and not in the same areas with immuno-compromised or paediatric patients. If separate areas are not available, provide expedited priority service to the patients suspected of having infectious TB. Allow only one patient at a time in the examination room.

- Ideally, isolate the patients admitted with infectious TB from other patients. However, if this is not possible, place the infectious TB patients in separate wards, rooms or areas that are away from wards; or the areas with non-TB patients (especially immunosuppressed or paediatric patients).
- Use appropriate signage and educational materials advising respiratory hygiene and cough etiquette.
- Ensure proper cleaning and sterilisation or high-level disinfection of potentially contaminated equipment such as endoscopes.
- Encourage out-patient management of TB patients to minimize the risk of facility-acquired transmission of TB.
- Schedule radiographs for the infectious and suspected TB patients during non-busy times and provide coughing patients with a surgical mask to wear.

#### Engineering controls

- Ensure that the waiting areas and examination rooms in the out-patients' department (OPD); and the wards or isolation rooms are well ventilated with open windows on opposing walls.
- Use local exhaust ventilation such as hoods, tents or booths where applicable, to control the source of infection.

#### Use of personal protective equipment

- Use personal respirators for protection as the last line of defence for health workers against nosocomial TB infection. (A respiratory protective device with the capacity to filter very small particles. Respirators with at least 95% efficiency for particles of 0.3 micron in diameter are needed to protect workers from *M. tuberculosis*).
- Wear respirators when entering high risk areas such as sputum induction rooms, bronchoscopy rooms and autopsy suites.
- **Note:** Respirators are disposable and can be re-used repeatedly for several months if they are properly stored (free of humidity and dirt). They are available in different sizes and should be "fit tested" to ensure that the right one is used for each health worker.
- Use surgical masks for infectious patients while being temporarily transported outside of isolation/separation areas.

**Note:** The surgical masks (cloth or paper) do not provide protection to the wearer from inhaling infectious droplet nuclei in the air, but they do prevent the spread of microorganisms from the wearer (e.g. TB patient).

### 4.3: Hepatitis Virus

Hepatitis B Virus (HBV) is **the major infectious hazard for health care personnel**, even more easily transmitted than HIV. Five to ten percent of HBV infected workers become chronically infected. Persons with chronic hepatitis B infection are at risk of chronic liver disease and are potentially infectious throughout their lifetimes. Hepatitis C Virus (HCV) is

also a blood-borne infection but is not transmitted as efficiently through occupational exposures to blood.

The comparative median risk of occupational transmission after exposure to an infected source is approximately:

HIV	0.3%
Hepatitis C Virus (HCV)	1.8%
Hepatitis B Virus (HBV)	23% to 37%

The areas with risk of exposure to HBV include the operating room/theatre, maternity wards and other in-patient wards; casualty departments, laboratories, blood banks, waste segregation and disposal points etc. Measures to control the hazard include the following:

#### Administrative controls

- Utilise the standard precautions of infection control routinely for all at the health facility.
- **Provide HBV vaccination to all the health workers who are at risk of exposure to blood or body fluids.**

Hepatitis B vaccine has been available since 1982 to prevent HBV infection. Vaccination for the Hepatitis B virus should ideally be done during initial orientation period for health workers. The immunization regimen consists of three doses given according to the schedule shown below:

First dose:	At elected date (within worker's orientation period)
Second dose:	One month later
Third dose:	Six months after the first dose

**Note:** Test the health workers 1-2 months after the vaccine series to make sure that vaccination has provided immunity to HBV infection. The vaccine efficacy is 90%. There is no vaccine against hepatitis C virus and no treatment after an exposure that will prevent infection.

- Provide Hepatitis B immune globulin (HBIG), which is effective in preventing HBV infection after an exposure. However, this may be difficult to implement in resource-constrained settings. The use of immune-globulin following exposure to hepatitis C virus is not recommended.

#### 4.4: Viral Haemorrhagic Fevers

Viral haemorrhagic fevers (VHFs) are diseases that damage the blood vessels and several internal organs of the patient, often causing bleeding. The virus is widespread and disseminated throughout the patient's body and as a result, the body fluids such as blood, urine, vomitus, pus, stool, semen, and saliva are infectious. Examples of VHFs include Lassa fever, Rift Valley fever, Marburg and Ebola haemorrhagic fevers; and yellow fever. A person can acquire a VHF through exposure to rodents or insects (although the natural reservoir for Ebola and Marburg VHFs is unknown), but person-to-person transmission of some viruses can occur through direct contact with infected material.



Health workers in contact with VHF patients are at high risk of acquiring the infection but the utilization of proper infection prevention precautions reduces this risk significantly. The following measures should be taken to control the hazard.

#### Administrative controls

- Utilise the **standard precautions** with all patients and the health workers who handle needles and syringes of patients with known or suspected VHF should **wear two pairs of gloves**
- Only staff trained to use VHF isolation precautions should have access to the suspected or confirmed VHF patients. Restrict non-essential staff and visitors from entering the isolation rooms; and maintain a log of persons entering the room.
- **Only provide single-use consumable items** such as needles, syringes, gloves etc in adequate quantities.
- Identify and train all the staff who will coordinate and be involved in implementation of the VHF activities.

#### Engineering controls

- Ensure that the isolation rooms are well ventilated but without air conditioning to avoid droplet or airborne transmission of infectious agents.

#### Work practice controls

- **Identify suspected cases** of VHF in patients with fever of more than 72 hours but less than two weeks; unexplained bleeding from mucous membranes, skin, conjunctiva or gastrointestinal system or are in shock. Also suspect in patients with severe illness and fatigue that do not respond to treatment for other likely causes of fever in the area; or with history of contact in previous three weeks with anyone who had symptoms/signs suggestive of VHF.
- **Isolate the suspected cases** in a single room or in an area within a ward that is separate and far away from other patients, with restricted internal and external access. The suspected VHF patient must also use an isolated toilet or latrine.
- **Set-up changing rooms for staff** working in the isolation area, outside of the isolation area where health workers will put on and remove protective clothing.
- Keep all contaminated clothing and supplies in the changing room until the cleaning staff trained in VHF isolation precautions take them to the laundry or disposal site.
- Thoroughly **clean** and **disinfect or sterilise** all reusable supplies and equipment in the health facility, such as thermometers, stethoscopes and other medical instruments after use with each VHF patient.
- Alert laboratory staff to the nature of specimens prior to sending them to the clinical laboratory.

- Use chlorine releasing agent for disinfection at the concentrations of 0.5% (for medical equipment, surfaces, patient bedding, reusable protective clothing before it is laundered, contaminated waste for disposal, for disinfecting gloved hands between patients, and for rinsing gloves, aprons, and boots before leaving the isolation room); and 0.5% (to disinfect excreta and bodies).
- **Perform proper safe waste management and disposal** in cases of suspected VHF that includes waste segregation; air-tight bag storage and use of safety boxes. Liquid waste, including patient excreta can be disposed of in an isolated toilet or latrine set aside for VHF cases. Burning using an incinerator or a pit for burning is the recommended method for disposal of other VHF-contaminated waste.
- **Use safe burial practices**, which include preparation of the body by spraying it and the area around it with 0.5% chlorine solution; placement of the body in a bag that must be securely closed and sprayed with 0.5% chlorine solution.
  - Transport the body to the burial site as soon as possible; and a health worker must accompany the body to ensure that safety precautions remain secure during the journey. The vehicle that transported the body must be disinfected with 0.5% chlorine solution.
  - The grave should be at least two meters deep and all the staff involved must wear protective clothing during these procedures.

#### Use of personal protective equipment

- Protect all persons who are involved with suspected and confirmed cases of VHF with personal clothing/equipment for instance:
  - All health workers providing direct care to suspected VHF patients.
  - Support staff who clean the isolation room, handle contaminated equipment and supplies; collect and dispose of the infectious waste from VHF patients.
  - Laboratory staff who handle specimens/body fluids from suspected VHF cases
  - Burial teams who remove bodies of deceased VHF patients.
  - Family members who care for the VHF patients.
- Ensure that patients with respiratory symptoms wear a face mask to contain respiratory droplets prior to placement in the isolation rooms or during transport.

Protective clothing consists of the following:

- a scrub suit or inner layer of clothing
- a gown or outer layer of clothing with long sleeves and cuffs
- a plastic apron worn over both layers of clothes
- a pair of thin gloves, that reach 10-15cm above the wrist
- a second pair of thin or thick gloves (double gloving), for cleaning spills, launder, handle disposable waste; to conduct autopsies or burial preparation
- a HEPA filter or other bio-safety mask
- cotton head covering
- clear eyeglasses or non-fogging goggles
- rubber boots or overshoes.

The outer pair of gloves, apron, and boots must be disinfected with chlorine solution before leaving the isolation room. The outer pair of gloves should be removed before leaving the isolation room.

#### 4.5: Fire Hazard

A fire in a health facility may put at severe risk the safety, health and lives of patients and care providers. Therefore, facilities must have an organized fire safety plan with clearly assigned responsibilities under the **direction and supervision of the facility administrator**. This plan should include prevention and response to fire measures and must be available to all personnel. Control of fire hazard involves taking the following measures:

##### Administrative controls

- **Fire safety education:** All health workers must participate in annual fire safety education sessions that include fire prevention and response measures; operation of fire fighting equipment; evacuation and review of specific responsibilities of every staff member.
- **Electrical safety:** Test all appliances, instruments and installations before use to determine compliance with grounding, current leakage and other device safety requirements.
- Enforce a program of **routine maintenance** for all electrical receptacles and plugs; wires and connectors to ensure safety; and label clearly all the 'start' and 'stop' switches.
- Store **minimum quantities of flammable substances** at restricted areas within the health facility.
- **Evacuation:** Develop clear evacuation plans for patients and staff. The evacuation routes can be horizontal or vertical but must be clearly marked, built of fire resistant materials if possible; free of obstacles, well illuminated and ventilated to avoid smoke accumulation.
  - The **emergency evacuation route** must not pass through or close to flammable storage areas; and should direct patients and staff to a safe place outside of the building or to a designated safe area.

- **Referrals:** Develop an emergency referral plan to the available health services, public or private, within the geographical area, which includes identification of transportation means, in the event that relocation of patients is necessary.
- **Emergency notification:** Establish a fire emergency notification system to the local fire department using the most direct, fast and reliable means of communication.

#### Engineering controls

- **Fire warning system:** Install a fire alarm system (automatic and/or manually activated) in every building to allow the early identification and response to fires.
- **Fire fighting equipment:** Install portable fire extinguishers appropriate to the different types of hazards, properly tagged and signalled; at easily accessible areas of the building. Extinguishers should be periodically checked according to regulations; and water hydrants/hoses must be conveniently distributed and located to allow water to effectively reach all potential fire points.
- **Sources of water:** Avail adequate sources of water for fire control purposes. In case the public water supply system is non-existent or unreliable, water supply should be guaranteed by elevated tanks or electric pumps. In the latter case, an emergency energy source must be available.
- **Access to the building:** Establish, clearly mark and keep free of obstacles, the access routes to the building for fire-fighters.

#### Work practice controls

- **Fire drills:** Conduct fire and evacuation drills at least annually for the health facility so as to:
  - Ensure that all personnel are trained to perform assigned duties in case of a fire.
  - Ensure that all personnel are familiar with the use and operation of the fire-fighting equipment.
  - Enable the administrator/fire emergency coordinator of the facility to evaluate the effectiveness of the plan.
  - Check the feasibility of a prompt and orderly discharge or transfer of patients already in the health facility.
  - Verify security measures to keep unauthorized persons out of the emergency area.
- **Flammable storage:** Designate specific areas for storage of flammables (e.g. diesel, alcohol, oxygen). Such items must be stored in proper conditions and protected from sources of excessive heat, fire, or electrical discharge and away from patient care areas.
- **Smoking/naked flame restrictions:** Adopt strict rules governing smoking within the health facility, which shall be made known to hospital personnel, to patients and to the public. The rules must include at least the following:

- i. Prohibiting smoking with clear “NO SMOKING” signs, within the facility and in any room or compartment where flammable liquid, combustible gas, or oxygen is being used or stored and in any other hazardous area.
  - ii. Not allowing open fires (e.g. waste burning, guardian kitchens) near flammable storage areas; and monitoring any open fires until completely extinguished.
- **Fire inspections:** Whenever feasible, request an annual inspection by the local fire department that includes verification of fire prevention measures and response readiness assessment (access to the building, current floor plan, storage places of flammable and explosive gases, sources of water, fire fighting equipment, patient rooms, exits and evacuation plans).
- Conduct emergency evacuation in a systematic fashion by moving all patients and personnel who are closest to the danger first.
- Do **NOT** use elevators for vertical evacuation or lock the patient rooms when s/he is alone in the room.

#### 4.6: Floods

It is difficult to prevent flooding of a health facility when it is due to a natural disaster. Health facilities should be built, to the maximum extent possible, on pieces of land that are naturally protected from flooding (e.g. elevated terrain). In cases of severe flooding, the building structures, equipment and supplies are presumed to be heavily contaminated with micro-organisms, primarily mold, spores and bacteria. Before re-opening, facilities must be evaluated to determine if they are damaged beyond repair or if they may be restored, repaired and re-used.

If a decision is made to repair and re-occupy the building, it must first undergo a building and life safety evaluation to determine if the structure is safe to enter and if there is sufficient safe electrical power to assist clean-up operations. Furthermore, the building must be evaluated for fire safety and protection.

The major activities typically associated with the restoration of a flooded building include:

1. Restoration of working sewage system
2. Extraction of standing water and sewage
3. Restoration of potable water system
4. Installation of appropriate containment for bio-aerosols as appropriate
5. Ventilation of the work area (e.g. open windows where possible)
6. Removal of heavily contaminated and/or damaged items and building materials, especially porous materials
7. Removal of surface contamination on non-porous materials by physical cleaning
8. Biocide/disinfectant treatment of surfaces if determined to be needed

9. Drying and reassessment for residual moisture in remaining structural materials
10. Repair and renovation of the structure and replacement of damaged items
11. Restoration of electrical power and backup generators
12. Thorough cleaning and drying of salvageable porous items (e.g., curtains, draperies, linens) if possible
13. Evaluation of equipment, medical support infrastructure (e.g., medical gases, steam, compressed air), furniture, records and documents, and supplies for damage
14. Cleaning and disinfecting surfaces in patient-care areas.

After the restoration work is finished and the facility is returned to service, periodic inspection and surveillance of the restored structure will be necessary to identify mold growth and other pathogens in the environment and initiate removal and control measures. Moreover, flooded facilities may provide opportunities for collection of stagnated water and mosquito proliferation. Appropriate measures should be taken to dry these areas as soon as possible.

#### 4.7: Violence

Workplace violence refers to incidents where health workers are abused, threatened or assaulted in circumstances related to their work, including while commuting to and from work. It involves an explicit or implicit challenge to their safety, well-being or health. It may be physical violence, which relates to use of force that results in physical, sexual or psychological harm. It may be psychological violence, which relates to intentional use of power, including threat of physical force that can result in harm to physical, mental, spiritual, moral or social development. Examples include verbal abuse, bullying, harassment and threats.

##### Risk Factors

Pay attention to abnormally high levels of absence on grounds of sickness, high levels of staff turn-over and previous records of violent incidents. The following factors are associated with high risk of workplace related violence:

- **Location:** Urban areas, highly populated and high crime areas; small and isolated health facilities.
- **Staffing:** Understaffed health facilities.
- **Resources:** Working with insufficient resources, including inappropriate equipment.
- **Management:** Culture of tolerance or acceptance of violence; management style based on intimidation; managers noted to have poor communication and interpersonal relationships.

**Risk Assessment**

- i. Analyse the available information from the official records concerning incidents, staff absenteeism and turn-over.
- ii. Analyse the available information on the management style.
- iii. Conduct regular workplace inspections.
- iv. Conduct discussions with health workers and their representatives.
- v. Carry out periodic general and situation-specific surveys.
- vi. Identify the situations at special risk such as health workers working alone; with people in distress; and in mental institutions.

**Prevention*****Administrative controls***

- Issue a clear policy statement that highlights the importance of the fight against workplace violence.
- Develop and reinforce the capacity of health workers to prevent workplace violence through training, counselling and promotion of well-being.

***Work practice controls***

- Develop a human-centred workplace culture based on safety, dignity, non-discrimination and tolerance. Institute a management style based on openness, communication and dialogue as well as respect for the dignity of individuals.
- Ensure that there is adequate staffing to cover peak periods, in admission units, acute care units and mental clinics.
- Promote information sharing and communication among the staff and working units. This defuses tension, frustration and breaks the taboo of silence that surrounds issues such as sexual harassment.
- Provide timely information to patients and companions, in situations involving distress and long waiting periods such as after accidents.
- Provide information and effective communication channels to health workers at special risk such as ambulance staff and home care workers.
- Improve work practices, for instance streamline client flow; avoid crowding; provide support for lone health workers especially at night etc.

**Management**

This is directed to minimise the impact of workplace violence and to ensure that such violence will not be repeated in future. It targets the victim, the perpetrator, the witnesses and all other staff directly or indirectly concerned by the violent incident.

1. Report and record all incidents involving both physical and psychological violence, including the minor and potential incidents where no actual harm resulted.
2. Ensure that all health workers know how and where to report incidents.

3. Conduct periodic review of the reports of such incidents as an indicator for improving workplace safety.
4. Provide appropriate treatment to all health workers affected by workplace violence. Ensure that services are available and known to all health workers.
5. Conduct a de-briefing for all those affected by workplace violence that includes sharing personal experience and helping those affected to come to terms with the incident.
6. Provide counselling support to the health workers affected by violence.
7. Put in place procedures to help solve problems before the situation, especially among health workers, supervisors or managers deteriorates further.
8. Support health workers during the entire period of rehabilitation and recovery from workplace violence. Allow all necessary time to recover but also encourage the health worker to return to work.



## 5: Operationalising Guidelines for Workplace Safety and Health

### 5.1: Introduction

This chapter discusses the framework for making the workplace safety and health programme operational. It includes a presentation of the strategic action points that are required to implement the programme and the institutional framework from the national level, through district level to the health facilities. In addition, the roles and responsibilities of important stakeholders are highlighted. Finally, it presents the monitoring and evaluation framework for the workplace safety and health programme.

### 5.2: Implementation

The incidence of accidents and work related disease and injuries in the health sector is still regrettably high and consequently, there is an urgent need for preventive and protective measures to be instituted at workplaces in order to guarantee the safety and health of workers. Occupational accidents and diseases not only cause great pain, suffering or death of the victim, but also threaten the lives of other workers and their dependants. The financial implication of putting in place and implementing effective workplace programmes within the health sector is very high. Nevertheless, it is important to mobilise the necessary resources because the cost of treatment, care, support and compensation of workplace-related events is likely to be even much higher.

- Workplace safety and health programmes should aim at eliminating the unsafe or unhealthy working conditions and dangerous acts, which account for nearly all occupational accidents and diseases.
- The supervisors and managers within the health sector need to know and understand the work involved; the principles of risk assessment and prevention; the current legislation; as well as the health and safety standards.

In managing safety and health at workplaces within the health sector, the supervisor or manager should:

**i. CONDUCT AN INITIAL REVIEW** of existing health and safety arrangements.

- This will provide useful information regarding the scope, adequacy and implementation of the current system. It also forms the basis for planning and monitoring of the programme.

**ii. SET POLICY ON SAFETY AND HEALTH**

- Prepare a written statement of your policy if the health facility employs 5 or more health workers. It should include details of the organisation and arrangements for its implementation. You must formally communicate the policy to all the staff.

### iii. ORGANISE THE WORKFORCE

- **Allocate responsibilities for safety and health.** This should be done at all levels in the organisation and thus helps to secure commitment and co-operation.
- **Ensure competence.** This is achieved by building capacity within the workplace in relation to health and safety knowledge; skills and experience. Appropriate resources should be allocated; and the training needs identified and met in a planned way.
- **Communicate.** This entails providing information about hazards, risks and preventive measures. It also involves measures to encourage/secure the participation of the entire workforce.

*Note:* The **documentation** of policies, procedures etc. is an important element in the successful management of health and safety within the workplace. Documentation should be sufficient to **support** the health and safety management system, not drive it. It should be **proportional** to the needs of the health sector on grounds of effectiveness and efficiency.

### iv. PLAN AND IMPLEMENT

- This involves setting objectives, identifying hazards, assessing risks, implementing performance standards and developing a positive attitude to health and safety. It includes: **what** is to be done; **who** is responsible; **when** it is to be done; and the desired **end** result. The standards must be measurable, achievable and realistic.

### v. MEASURE THE PERFORMANCE

- This may be achieved by the adoption of two approaches: **'active'** systems which monitor the achievement of plans and the extent of compliance with standards; and **'reactive'** systems which monitor accidents, ill-health and incidents.

### vi. REVIEW THE PERFORMANCE

- Conduct audits and performance reviews that can feedback to the sector. This will build the capacity for maintenance; and improve the ability to manage risks by learning from experience.

## 5.3: Institutional Framework

A safe and healthy workplace can only be ensured with the commitment from all levels of management and workers, collaboration as well as partnership. The workplace policy guidelines will be implemented using the existing institutional framework. The sector will establish functional committees at all levels of the health care delivery system namely: national, district, health sub-district and health facility. The successful implementation of workplace safety and health will require application of the following general principles:

- a) All managers, supervisors and health workers must be trained in how to carry out their workplace safety and health responsibilities.
- b) Workplace and safety responsibilities must be listed in the job descriptions of managers and health workers.
- c) Workplace safety and health responsibilities must be part of the job performance assessment process.

There will be a **National Safety and Health Committee** with the responsibility to handle all issues related to workplace safety and health for all the health workers in the country. The members will be drawn from different departments but with selective representation as follows: one third shall be freely chosen representatives of the health workers; one third shall be drawn from the Management group; and the other third shall comprise of technical persons in the field of workplace safety and health. The Committee shall have a Chairman who is appointed by the Director General of Health Services and the Secretariat will be housed in the Division responsible for management of human resources for health. The office responsible for Human Resource Management will ensure that an officer is dedicated to it on full time basis.

The **District Safety and Health Committee** will have membership constituted in a similar manner to the one at national level. It will provide a vertical linkage with responsibility for handling district level safety and health issues. It will be chaired by the officer responsible for the management of district health services, who will assign an officer from the District Health Team (DHT) to be the Secretary of the committee. The Secretary will act as the link between the District Safety and Health Committee and the Health Sub-District Safety and Health Committees. The responsibilities will include but not be limited to:

- Receiving all reports from the health sub-districts on occupational incidents and events.
- Preparation and presentation on a regular basis, workplace safety and health issues from the health sub-district reports for discussion by the district committee.
- Compiling on a regular basis, reports of health sector occupational accidents and incidents for submission to the offices responsible for labour at district and national levels.
- Coordinating capacity building activities as well as the provision of regular technical support supervision to the health sub-district committees and health facilities.
- Following up with relevant offices and authorities, all issues of compensation for workers from the district with permanent disability arising from occupational exposure to hazards.

The **Health Sub-District Safety and Health Committee** will similarly have one third of its membership being appointed from the health workers; one third from the Management of the health sub-district; and one third from technical persons in the field of workplace safety and health. It will be chaired by the officer responsible for management of health services

in the health sub-district. An officer from the health sub-district will be assigned the responsibility of being Secretary to the Committee. The Secretary will act as a link between the Health Sub-District Safety and Health Committee and the committees at health facilities. The responsibilities will include but not be limited to:

- Receiving all reports from the health facilities on occupational incidents and events.
- Preparation and presentation on a regular basis, workplace safety and health issues from the health facility reports for discussion by the health sub-district committee.
- Compiling on a regular basis, reports of occupational accidents and incidents from the health facilities for submission to the district health office.
- Coordinating capacity building activities as well as the provision of regular technical support supervision to the health facilities.
- Following up with relevant offices and authorities, all issues of compensation for workers from the health sub-district with permanent disability arising from occupational exposure to hazards.

The **Health Facility Safety and Health Committee** will also have one third of its membership being appointed from the health workers; one third from the Management of the health facility; and one third from technical persons in the field of workplace safety and health. It will be chaired by Head of the health facility or senior manager such as Hospital Administrator, Principle Nursing Officer etc. The Committee must be involved and take responsibility during establishment and maintenance of the workplace safety and health system. An officer from the health facility will be assigned the responsibility of being Secretary to the Committee. Wherever possible, the clients will also be involved in workplace safety and health initiatives. The Committee will among other things:

- Coordinate consultation, policy setting, and risk management implementation
- Evaluate the hazards, compile the injury data, and make recommendations for prevention
- Regularly review and analyse data from the exposure experience of the institution, incorporating an analysis of near-misses to determine the need for change
- Ensure appropriate follow-up and post-exposure prophylaxis as determined by the nature of the injury and source patient.

The Secretary will act as a link between the Health Facility Safety and Health Committee and the health workers. The responsibilities will include but not be limited to:

- Receiving and compiling on a regular basis, reports of occupational accidents and incidents from the health workers
- Preparation and presentation on a regular basis, workplace safety and health issues from the health workers for discussion by the health facility committee
- Coordinating the provision of regular training and capacity building for workplace safety and health for the health workers

- Following up with relevant offices and authorities, all issues of compensation for workers from the health facility with permanent disability arising from occupational exposure to hazards.

## **5.4: Roles and Responsibilities**

### **5.4.1. Managers and Supervisors**

The heads of health facility, managers and supervisors have the following responsibilities in relation to overall workplace safety and health:

- Ensure that a Safety and Health Committee is in place and facilitated to meet regularly.
- Mobilise and avail the resources for the workplace programme. Establish the workplace programme for all health workers.
- Ensure that there is a viable and operational system in place that includes the health facility policies and procedures.
- Disseminate the national workplace Safety and Health Guidelines within the facility and ensure that all staff are knowledgeable.
- Set the goals and objectives for workplace programme, including the time-frames and indicators for achieving the objectives.
- Define and allocate responsibilities to the relevant management and supervisory positions.
- Identify training needs and ensure that all staff members are appropriately trained.
- Support consultations and worker participation in facility workplace programme.
- Ensure that steps are taken to correct deficiencies in the workplace programme, including investigation of incidents and accidents as well as taking corrective action.
- Ensure that emergency procedures are in place and operating effectively in the workplace.
- Ensure undertaking of regular risk management activities and maintenance of effective risk controls.
- Ensure that injury management procedures, including HIV occupational post- exposure prophylaxis and workplace reinsertion are followed.
- Review workplace safety and health activities and report progress and issues to senior facility management.
- Report on the progress and/or issues to the Ministry and other relevant authorities.

### 5.4.2. Workers

Every worker has the following responsibilities in relation to workplace safety and health:

- Comply with the established workplace safety and health guidelines
- Report to the Management through the Safety Committees all incidents and accidents
- Look after their own safety and health as well as that of the other health workers at the workplace
- Follow safe work practices and use personal protective equipment
- Participate in workplace safety and health consultation and training initiatives
- Cooperate with managers and supervisors so that the facility can meet its workplace safety and health objectives
- Do not deliberately or intentionally put themselves or anyone else at risk or misuse anything provided in the interest of safety and health.

### 5.5: Monitoring and Evaluation

Workplace safety and health activities can be monitored and evaluated in several ways, including:

#### **Performance monitoring and measurement**

Performance monitoring and measurement is conducted through the tracking of selected quantitative or qualitative performance indicators. The performance monitoring system should provide feedback and information to determine if the workplace safety and health activities are in place and operating effectively. Results of the monitoring system will serve as the basis for decisions about corrective or improvement activities. The performance indicators can be active or reactive and both should be included in a performance monitoring plan. Active monitoring should include:

- i. Reviewing specific plans and established performance criteria and objectives
- ii. Systematic inspection of work systems, premises, plant, and equipment
- iii. Surveillance of the working environment, including work organization
- iv. Surveillance of workers' health, where appropriate, through suitable medical monitoring for early detection of signs and symptoms of harm to health
- v. Compliance with applicable national norms and regulations, collective agreements, and other commitments to which the Ministry of Health subscribes.

Reactive monitoring should include the identification, reporting, and investigation of:

- i. Work-related injuries, ill health (including monitoring of aggregated sickness absence records), diseases, and incidents
- ii. Other losses such as damage to property

- iii. Deficient safety and health performance
- iv. Workers rehabilitation and return to work programs.

### **Investigation of work-related injuries, ill health, diseases, and incidents**

Work-related injuries, diseases, and incidents must be investigated by competent persons with the participation of workers and their representatives. The investigation of the origin and underlying causes of these incidents and diseases helps to identify any failures in the workplace safety and health system and should be documented.

For incident reporting, an incident reporting form must be filled out by the affected worker, giving as much information as possible about what happened (See Annex 4 for a sample Incident Reporting form). The incident reporting form should go to the manager or supervisor who should take the steps to investigate the circumstances. The results of the investigations should be communicated to the facility senior management and to the Workplace Safety and Health Committee. The decisions and recommendations of the committee and senior management must be conveyed to the appropriate persons for corrective action.

### **Audits**

A workplace safety and health audit is an independent, systematic exercise which tries to find whether workplace safety and health activities are meeting planned arrangements and complying with regulatory requirements. It is different from a safety inspection. Whereas it may include elements of inspection, audits go beyond that to look at policies, procedures, and plans. System records and documents are examined to judge how well these policies, procedures, and plans have been implemented.

Based on the review of policies, procedures, and plans that were developed in the past and implemented at the time of the audit, the auditors recommend changes for future improvement in the workplace safety and health performance. Audits should be:

- i. Repeated on a regular basis from time to time (e.g. every three to five years)
- ii. Planned to focus on the highest risk areas
- iii. Based on checklists
- iv. Conducted by qualified people
- v. Ended with an audit report that presents findings and recommendations that must be communicated to those responsible for corrective actions.

### **Management reviews**

Management reviews evaluate the overall strategy of workplace safety and health to determine if it meets planned performance objectives. Management reviews consider the results of work-related injuries, ill health, diseases, and incident investigations, performance monitoring and measurement, of audits; and of additional internal and external inputs as

well as changes, including organizational changes, that could affect the workplace safety and health system.

The results of the management reviews should be recorded and communicated to the Workplace Safety and Health Committee and the persons responsible for the relevant elements of the workplace safety and health management system, so they can take appropriate action. (Annex 5 presents a Summary checklist for workplace safety and health that can be used by managers to quickly assess the facility compliance with these guidelines).

**Note:**

- a) The commitment of facility managers, supervisors, employees and clients is required to create and maintain a safe, healthy workplace and to ensure that the risk management strategy works appropriately.
- b) Managers, supervisors, and employees' jobs descriptions should include clear and specific tasks and responsibilities related to workplace safety and health.
- c) Information materials for clients should also underscore their responsibilities in helping with keeping a safe and healthy facility.
- d) Each facility must have a Workplace Safety and Health Committee that can coordinate consultation, policy setting, and risk management implementation. Membership should be from technical persons in the field of workplace safety and health; representatives of managers at different levels, supervisors and employees. It would also be desirable to have community representatives attending relevant meetings of the committee as appropriate.



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## Annexes

### Annex 1: Extract from the Constitution

#### The Constitution of the Republic of Uganda (15 February 2006).

The following articles refer to decent work:

- i. **Article 25(1):** *No person shall be held in slavery or servitude.*
- ii. **Article 25(2):** *No person shall be required to perform forced labour.*
- iii. **Article 29(1):** *Every person shall have the right to – (c) freedom of association which shall include the freedom to form and join associations or unions, including trade unions and political and other civic organizations.*
- iv. **Article 34 (4):** *Children are entitled to be protected from social or economic exploitation and shall not be employed in or required to perform work that is likely to be hazardous or to interfere with their education or to be harmful to their health or physical, mental, spiritual, moral or social development.*
- v. **Article 39:** *Every person has a right to a clean and healthy environment.*
- vi. **Article 40(1):** *Parliament shall enact laws –*
  - (a) *to provide for the right of persons to work under satisfactory, safe and healthy conditions;*
  - (b) *to ensure equal pay for equal work without discrimination; and*
  - (c) *to ensure that every worker is accorded rest and reasonable working hours and periods of holidays with pay, as well as remuneration for public holidays.*
- vii. **Article 40(2):** *Every person in Uganda has the right to practice his or her profession and to carry on any lawful occupation, trade or business.*
- viii. **Article 40(3):** *Every worker has a right –*
  - (a) *to form or join a trade union of his or her choice for the promotion and protection of his or her economic and social interests;*
  - (b) *to collective bargaining and representation; and*
  - (c) *to withdraw his or her labour according to law.*
- ix. **Article 40(4):** *The employer of every woman worker shall accord her protection during pregnancy and after birth, in accordance with the law.*

**Annex 2: Checklist for workplace inspection**

**Checklist for Workplace Inspection**

**Health facility:** ..... **Date:** .....

**Persons conducting the inspection:**

.....  
 .....

**Acceptable:** Y  
**Non acceptable:** N  
**Not applicable:** N/A

Items inspected	Y	N	N/A
<b>Housekeeping</b>			
Work areas free from rubbish and obstruction			
Surfaces even and safe			
Floor openings covered			
Stock/materials stored safely			
Aisles unobstructed and clearly defined			
Aisles wide enough			
Aisles with adequate lighting			
<b>Electrical</b>			
No broken plugs, sockets, switches			
No frayed or defective leads			
Power tools in good condition			
No work near exposed live electrical equipment			
No strained leads			
No cable-trip hazards			
Switches/circuits identified			
Lock-out procedures/danger tags in place			
Earth leakage system used			
Start/stop switches clearly identified			
Switchboards secured			
Appropriate fire fighting equipment			
<b>Lighting</b>			
Adequate and free from glare			
Windows clean			
No flickering or inoperable lights			
Emergency lighting system			
<b>Fire control</b>			
Extinguishers in place			
Fire fighting equipment serviced/tagged			
Appropriate signing of extinguishers			
Extinguishers appropriate to hazard			
Emergency exit signage			
Exit doors easily opened from inside			
Exit path ways clear of obstruction			
Smoking/naked flame restrictions observed			
Minimum quantities of flammables at workstation			

Items inspected	Y	N	N/A
Flammable storage procedures			
Emergency personnel identified and trained			
Emergency procedures documented and issued			
Emergency telephone numbers displayed			
Trail evacuations conducted			
Personnel trained in use of fire fighting equipment			
<b>Hazardous substances</b>			
Stored appropriately			
Containers labeled correctly			
Adequate ventilation/exhaust systems			
Protective clothing/equipment available			
Waste disposal procedures			
Chemical handling procedures followed			
Appropriate emergency/first aid equipment (shower, eye bath)			
Hazchem signing displayed			
<b>Stairs, steps, and landings</b>			
No worn or broken steps			
Handrails in good repair			
Clear of obstructions			
Adequate lighting			
Emergency lighting			
Non-slip treatments			
<b>Workplace ergonomics</b>			
Workstation and seating design acceptable			
Use of excessive force and repetitive movements minimized			
Appropriate training provided			
<b>First aid</b>			
Cabinets and contents clean and orderly			
Stocks meet requirements			
Qualified first aiders			
<b>Material storage</b>			
Stacks stable			
Heights correct			
Sufficient space for moving stock			
Material stored in racks/bins			
Shelves free of rubbish			
Floors around stacks and racks clear			
Drums checked			
Pallets in good repair			
Heavier items stored low			
No danger of falling objects			
No sharp edges			
Safe means of accessing high shelves			
<b>Personal protection</b>			
Employees provided with PPE			
PPE being worn by employees			
<b>Public protection</b>			
Appropriate barricades and fencing secure and in place			
Signage in place			
Suitable lighting for public access			
Footpaths clean and free from debris			
Site access controlled			

Items inspected	Y	N	N/A
Traffic control procedures in place			
Public complaints actioned			
<b>Machinery and workbenches</b>			
Adequate work space			
Clean and tidy			
Free from excess oil and grease			
Adequately guarded			
Warnings or instructions displayed			
Emergency stops appropriately placed and clearly identifiable			
Operated safely and correctly			
Workbenches clear of rubbish			
Tools in proper place			
<b>Vehicles</b>			
Vehicles in good condition			
Daily safety inspection procedures			
Fault reporting notification system used			
Drivers trained and licensed			
Tires satisfactory			
<b>Welding</b>			
Gas bottles securely fixed to trolley			
Welding fumes well ventilated			
Fire extinguisher near work area			
Only flint guns used to light torch			
Vision screens used for electrical welding			
LPG bottles within 10 year stamp			
PPE provided and worn			
<b>Demolition and excavations</b>			
Access prevented to demolition/excavation area			
Overhead protection in place			
Protection of general public			
Signage displayed			
Safe work procedures in place			

*Adapted from: Occupational Health and Safety Management Framework Model. Department of Human Services, Public Hospital Sector. State of Victoria, Australia*

**Annex 3: Potential ergonomic hazards and solutions**

Potential Hazard	Example	Potential Solution
Lifting, handling, transferring patients	Dressing, bathing, feeding, and toileting	Minimizing manual lifting of patients in all cases and eliminating lifting when possible.
Transferring equipment	Transferring equipment like IV poles, wheelchairs, oxygen canisters, respiratory equipment, dialysis equipment, x-ray machines, or multiple items at the same time	Place equipment on a rolling device if possible to allow for easier transport, or have wheels attached to the equipment. Push rather than pull equipment when possible. Keep arms close to your body and push with your whole body not just your arms. Assure that passageways are unobstructed. Attach handles to equipment to help with the transfer process. Get help moving heavy or bulky equipment or equipment that you can't see over. Don't transport multiple items alone for example if moving a patient in a wheelchair as well as an IV pole and/or other equipment get help, don't overexert your self.
Reaching into deep sinks or containers	Washing dishes, laundry, or working in maintenance areas and using a deep sink	Placing an object such as a plastic basin in the bottom of the sink to raise the surface up while washing items in the sink or remove objects to be washed into a smaller container on the counter for scrubbing or soaking and then replace back in the sink for final rinse.
Reaching or lifting hazards	Lifting trash, laundry or other kinds of bags	<p>Using bags for laundry and garbage handling and housekeeping that have side openings to allow for easy disposal without reaching into and pulling bags up and out. The bags should be able to slide off the cart without lifting.</p> <p>Limiting the size and weight of these bags and provide handles to further decrease lifting hazards. Using garbage cans that have a frame vs. a solid can to prevent plastic bags from sticking to the inside of the can or use products that stick to the inside of the garbage can that prevent the bag from sticking.</p> <p>Limit the size of the container to limit the weight of the load employee must lift and dump. Place receptacles in unobstructed and easy to reach places.</p>

Adapted from the US Department of Labour, Occupational Safety and Health Administration, Health Care Wide Hazards Module

**Annex 4: Work restrictions for infected health care providers**

<b>Disease/problem</b>	<b>Work restrictions</b>	<b>Duration</b>
Conjunctivitis	Restrict from patient contact and contact with patient's environment	Until discharge ceases
Diarrhoeal Diseases	Restrict from patient contact, contact with the patient's environment, or food handling	Until symptoms resolve
Diphtheria	Exclude from duty	Until antimicrobial therapy is completed and 2 nasopharyngeal cultures obtained 24 hours or more apart are negative
Hepatitis A	Restrict from patient contact, contact with patient's environment and food handling	Until seven days after onset of jaundice
Hepatitis B (workers with acute or chronic antigenaemia)		
Workers who do not perform exposure-prone invasive procedures	No restrictions	Standard precautions should always be observed.
Workers who perform exposure-prone invasive procedures	Do not perform exposure-prone invasive procedures until counsel from an expert review panel has been sought. Panel should review and recommend procedures the worker can perform taking into account specific procedure as well as skill and technique of worker,	Until hepatitis B e antigen is negative
HIV	Do not perform exposure-prone invasive procedures until counsel from an expert review panel has been sought, panel should review and recommend procedures the worker can perform, taking into account specific procedure as well as skill and technique of the worker	Standard precautions should always be observed
Measles (active)	Exclude from duty	Until seven days after the rash appears
Meningococcal infections	Exclude from duty	Until 24 hours after start of effective therapy
Mumps (active)	Exclude from duty	Until 9 days after onset of parotitis



Disease/problem	Work restrictions	Duration
Pertussis (active)	Exclude from duty	From beginning of catarrhal stage through third week after onset of paroxysms or until five days after start of effective antimicrobial therapy
Rubella (active)	Exclude from duty	Until five days after rash appears
Scabies	Restrict from patient contact	Until treated
Staphylococcus aureus infection (active, draining skin lesions)	Restrict from contact with patients and patient environment or food handling	Until lesions have resolved
Streptococcal infection group A	Restrict from contact with patients and patient environment or food handling	Until 24 hours after adequate treatment started
Tuberculosis (active disease)	Exclude from duty	Until proven non-infectious
Varicella (active)	Exclude from duty	Until all lesions dry and crust
Viral respiratory infections (acute, febrile)	Consider excluding from the care of high-risk patients for complications of influenza or contact with their environment during community outbreak of RSV and influenza (e.g. during winter)	Until acute symptoms resolve
Zoster Localized, in healthy person	Cover lesions, restrict from care of high-risk patients (those susceptible to varicella and who are at increased risk of complications of varicella, such as neonates and immuno-compromised persons of any age)	Until all lesions dry and crust
Generalized or localized in immuno-suppressed person	Restrict from patient contact	Until all lesions dry and crust

**Annex 5: Incident reporting form**

**Note:** This form should be filled in by the individual staff member involved, immediately following an incident or injury, and should be submitted to the person responsible for workplace safety and health in the facility

**Health facility:** .....

**Date:** .....

**1. Information on the person involved in the incident**

Name: .....

Date of birth: .....

Address:

Occupation/position:

Unit/department:

Gender:            Male.....            Female.....

**2. Details of the incident**

Date of the incident: .....

Time of the incident: .....

Place in which the incident happened: .....

What activity was being performed by person injured:

**3. Likely cause of the incident**

Sharps injury: .....Needle.....Blade.....

Biological exposure (specify):

Chemical exposure:.....Single.....Prolonged.....

Contact – electricity:

Exposure – hot or cold:

Manual handling (patient):

Manual handling (other – specify):

Physical assault:

Verbal abuse:

Slip/trip/fall:

Fall from height:

Struck by moving object:

Other (specify)

**Procedure type:**

During preparation of procedure:

During procedure:

Clean-up after procedure:

During sharps disposal:

During garbage disposal:

Other (specify):

**4. Detail of injury**

Did an injury occur? Yes..... No.....

Bodily location(s):

**Nature of injury**

Needle stick:

Body fluid exposure:

Chemical exposure:

Dermatitis:

Burn:

Foreign body:

Electric shock:

Laceration:

Bruising:

Sprain/strain:

Fracture:

Stress/anxiety:

Pain/discomfort:

Other (specify):

**Treatment required at the time of the incident**

Report only:

First aid:

Medical treatment:

Needle stick follow-up

**5. Details of personal protective equipment (PPE)**

Did this task require PPE? Yes..... No.....

Was correct PPE being used at the time of the incident? Yes..... No.....

**PPE worn**

Gloves:

Eye protection:

Face protection:

Gowns/aprons:

Footwear:

**6. Other details about the incident**

Did the incident involve a patient?

Did the incident involve a visitor?

Patient or visitor name:

**Signature:** .....

*Adapted from: Occupational Health and Safety Management Framework Model. Department of Human Services, Public Hospital Sector. State of Victoria, Australia*

**Annex 6: Summary checklist for facility workplace safety and health**

**Health facility:** ..... **Date:** .....

**Note:** The purpose of this summary checklist is to monitor the compliance with the basic workplace safety and health activities by the facility. It should be implemented by the person in charge of workplace safety and health activities and/or the workplace safety and health committee of the facility.

**Done:** Y  
**Not done:** N  
**Not applicable:** N/A

Activities	Y	N	N/A
<b>Risk management</b>			
Inspections of the workplace are conducted periodically (every six months)			
There is a systematic procedure for recording, reporting, analyzing, and investigating accidents and injuries in the workplace			
There is a system to verify that new infrastructure, equipment, and materials comply with required technical specifications			
Risk assessment is conducted using the information gathered			
Appropriate risk control activities are conducted based on the risk assessment			
Results of measures implemented are monitored and reviewed to introduce any necessary corrections or modification to the plans executed			
There are clearly assigned responsibilities for risk management within the facility			
<b>Worker's safety and health promotion</b>			
Basic information on infectious exposures and other hazards is provided to every new health worker within the first week of employment			
Group sessions for facility staff are conducted at least annually, where updated information on infectious exposures and other hazards is communicated			
Educational activities related to infectious exposures and other hazards are conducted regularly in the workplace			
Where appropriate, male and female condoms are made available to health workers			
Health workers' rights and responsibilities with regard to workplace safety and health, including the right to confidentiality, are disseminated			
Educational activities for patients and their companions are conducted regularly in the facility			
<b>Prevention of occupational infections and illnesses</b>			
Standard precautions for infection prevention are thoroughly implemented in the facility			
Transmission-based precautions: airborne, droplet, or contact, are implemented in the facility according to the risks associated with specific infection transmission mechanisms			
An occupational HIV post-exposure prophylaxis is effectively implemented in the facility			
Specific prevention measures for TB are implemented in the facility, including early identification of TB patients, isolation where needed, and use of personal respiratory protection by workers			
Hepatitis B vaccine is offered to all health care workers who have a reasonable chance of exposure to blood or body fluids, at no cost to the worker			
The health facility encourages compliance with the adult immunization schedule, as appropriate and according to availability of resources			

Activities	Y	N	N/A
Whenever possible, the facility makes the influenza vaccine available annually for health providers			
There are procedures established for exposure to chemical hazards			
There are procedures established to avoid ergonomic hazards			
<b>Care, rehabilitation, and workplace reinsertion</b>			
Wherever conditions allow, the facilities offer workers the opportunity of an annual medical check-up			
Health workers are educated about the signs and symptoms of the most frequent illnesses at the workplace, including TB, HIV, malaria, hypertension, and diabetes, and instructed to report promptly for evaluation should these develop			
Health facilities in high TB prevalence areas conduct periodic active screening for symptoms with further evaluation of those found to have symptoms compatible with TB			
Laboratory support with the capability to perform tests for TB, HIV, malaria, and glycaemia is directly available at the facility or through an effective referral system			
Voluntary testing for health care workers who wish to know their HIV status is encouraged and made available by the health facility, using rapid tests whenever possible			
Voluntary testing for HIV is undertaken at the request and, if necessary, with the written informed consent of the health worker and is provided based on informed consent, accompanied by counseling, and ensuring confidentiality			
Health care workers affected by illness receive appropriate care and support that is provided to the maximum extent possible free of charge			
There are procedures for reinsertion of workers affected by illness to their jobs and these procedures follow the principles of reasonable accommodation			
The reinsertion of workers affected by infections or illness to their jobs takes into account the health and safety of patients			
<b>Emergency situations</b>			
The facility has appropriate plans that enable it to cope with emergencies provoked by pandemics/epidemics such as viral haemorrhagic fevers, avian influenza or cholera			
The facility has appropriate plans that enable them to cope with emergencies provoked by internal disasters such as fire or flooding			
<b>Operationalization and institutional responsibilities</b>			
A senior facility manager: director, clinical director, or facility head has the responsibility for establishing and maintaining the workplace safety and health system in the facility			
A Workplace Safety and Health Committee that can coordinate consultation, policy setting, and risk management implementation is formed in the facility (according to the size of the facility)			
All managers and supervisors are trained in how to carry out their workplace safety and health responsibilities			
Workplace and safety responsibilities are listed in job descriptions of managers and employees and part of the job performance assessment process			
<b>Monitoring and evaluation</b>			
The facility conducts periodic workplace safety and health performance monitoring and measurement			
The facility has a system for on-going investigation of work-related injuries, ill health, diseases, and incidents			
The facility conducts periodic workplace safety and health audits			
The facility conducts periodic workplace safety and health management reviews			

*This publication is made possible by the support of the American people through the United States Agency for International Development. The views expressed in this document do not necessarily reflect the views of the United States Agency for International Development or the United States Government.*



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