Environmental and Social Management System Implementation Handbook

HEALTH CARE FACILITIES

IFC | International Finance Corporation
WORLD BANK GROUP

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Welcome & How to Use This Handbook

Environmental and social responsibility is becoming more and more important in today's global economy. There are thousands of environmental and social codes and standards in the world today. The codes and standards define the rules and the objectives. But the challenge is in the implementation. An environmental and social management system (ESMS) helps companies and organizations to integrate the rules and objectives into core operations, through a set of clearly defined, repeatable processes.

This Handbook is intended to be a practical guide to help you develop and implement an environmental and social management system, which should help to improve overall operations.

In the current economic climate, health care facilities are under pressure to perform or even just survive. New initiatives are often met with resistance as people struggle to keep up with their day-to-day responsibilities. Some people think that an environmental and social management system must be big, complicated and expensive. But that is not really true. To be effective, a management system needs to be scaled to the nature and size of your organization.

Your facility likely already has existing management systems for managing the delivery and quality of healthcare services and staff and patient safety. This Handbook will help you expand your existing systems to include environmental and social performance. Our hope is that this Handbook will accelerate your journey of continual improvement, the benefit of your facility overall, as well as your employees, patients, and other stakeholders.

Quick Reference for Using this Handbook	
Sections I – II	These sections provide background on environmental and social management systems (ESMS).
Section III	This section provides step-by-step instructions on how to develop and implement an ESMS. If you see a Toolkit icon, it means that there is an accompanying tool in the ESMS Toolkit.
ESMS Toolkit	This companion publication gives tools, including forms, templates, checklists, and other useful documents, to help you develop and implement the systems described in the Handbook. We suggest that you adapt each tool for your company.
ESMS Self-Assessment and Improvement Guide	This companion publication contains a questionnaire, maturity matrix, and improvement tips to help you measure the maturity of your ESMS and develop a plan for improvement.

Acknowledgements

I

Benefits of an Environmental and Social Management System

Benefits of an Environmental and Social Management System for Health Care Facilities

Today, health care facilities are confronted with a number of significant environmental and social challenges. None of the challenges is insurmountable, but if not effectively assessed and managed, they will hurt the quality of your patient care, profitability, reputation, and prospects for future sustainability.

Among these challenges are the increasing cost of energy and water, the growing power and influence of regulatory agencies, and rapidly evolving community awareness and concerns about environmental and social issues. These risks are in addition to the primary risk of failing to provide high-quality health care or build patient confidence. All of these risks ultimately have financial consequences and are driving forces that should motivate you to implement a management system for your health care facility. A management system will enable you to consistently foresee and address issues confronting your facility so you can prevent potential risks from becoming actual problems.

Implementing an environmental and social management system (ESMS) can have direct financial benefits. Conserving and using energy and water more efficiently helps to reduce operational costs. Reducing waste and discharges

"As a leading producer and exporter, we operate in competitive, globalized and volatile markets. Our management system based approach towards quality, environment and social issues has helped us attract and keep our global clientele through uncompromising product quality; prompt, reliable delivery; and fair, transparent and ethical business practices."

Managing Director - Producer and export company

can minimize costs of waste disposal, which have been steadily increasing over time. A management system can help you benchmark your expenditures against industry standards and identify potential operational cost savings.

The same tangible benefits can be realized on the social side as well. Clear, transparent human resource policies and procedures improve communication between healthcare staff and supervisors. This helps to anticipate and avoid labor problems. Effective occupational health and safety management procedures will enable you to identify workplace hazards so you can eliminate or reduce their potential negative impacts through controls and employee training on the avoidance of risks. This can not only reduce near misses, accidents and fatalities, but can also lead to bottom-line business benefits such as reduced absenteeism and worker turnover, and lower insurance premiums for workers' compensation.

"We are facing intense global competition and declining spending during the current global economic crisis. Improving our environmental and social management is helping us to reduce material inputs, minimize waste and improve our competiveness and our profitability."

CFO - Manufacturer

Many healthcare facilities already use management systems for patient care, quality control and occupational health and safety. An environmental and social management system (ESMS) simply extends that approach to the management of your facilities' impact on the environment, your staff and other stakeholders, including the community that you serve.

Ultimately, your management systems should be integrated and centralized in one comprehensive system, instead of having separate systems for quality, occupational health and safety, and the environment. This handbook will help you implement an integrated ESMS that is appropriate for the size and nature of your health care facility.

II

Understanding an Environmental and Social Management System

Understanding an Environmental and Social Management System

OVERVIEW

A management system is a set of processes and practices to consistently implement your facility's policies to meet your objectives. The goal is to make sure that you have the appropriate policies and procedures in place and that people consistently follow them. The management system helps to assess and control your risks and is the key to lasting improvement. A key feature is the idea of continual improvement – an ongoing process of reviewing, correcting and improving your system. The most common method is the Plan-Do-Check-Act cycle (PDCA), described below.

Identifying and analyzing the risks and objectives

What is important for you as an organization and what are you going to do about it?

Developing and implementing a potential solution

What actions will you take? Who, what, where, when and how?

Implementing the improved solution

What will you change if results are not what you expected?

Measuring how effective the solution was, and analyzing whether it could be improved

Did you see the change you expected after implementing the actions?

PLAN | DO | ACT | CHECK

In the workplace, an effective management system is comprised of trained, committed people routinely following procedures.

ELEMENTS OF AN ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM (ESMS)

A solid, functioning environmental and social management system (ESMS) is made up of interrelated parts. Take a look at the nine elements of an effective ESMS. Each of these elements is important, because they help you to assess, control and continually improve your environmental and social performance, as part of the Plan-Do-Check-Act cycle. The following section presents step-by-step instructions on how to develop and implement a system using these elements.
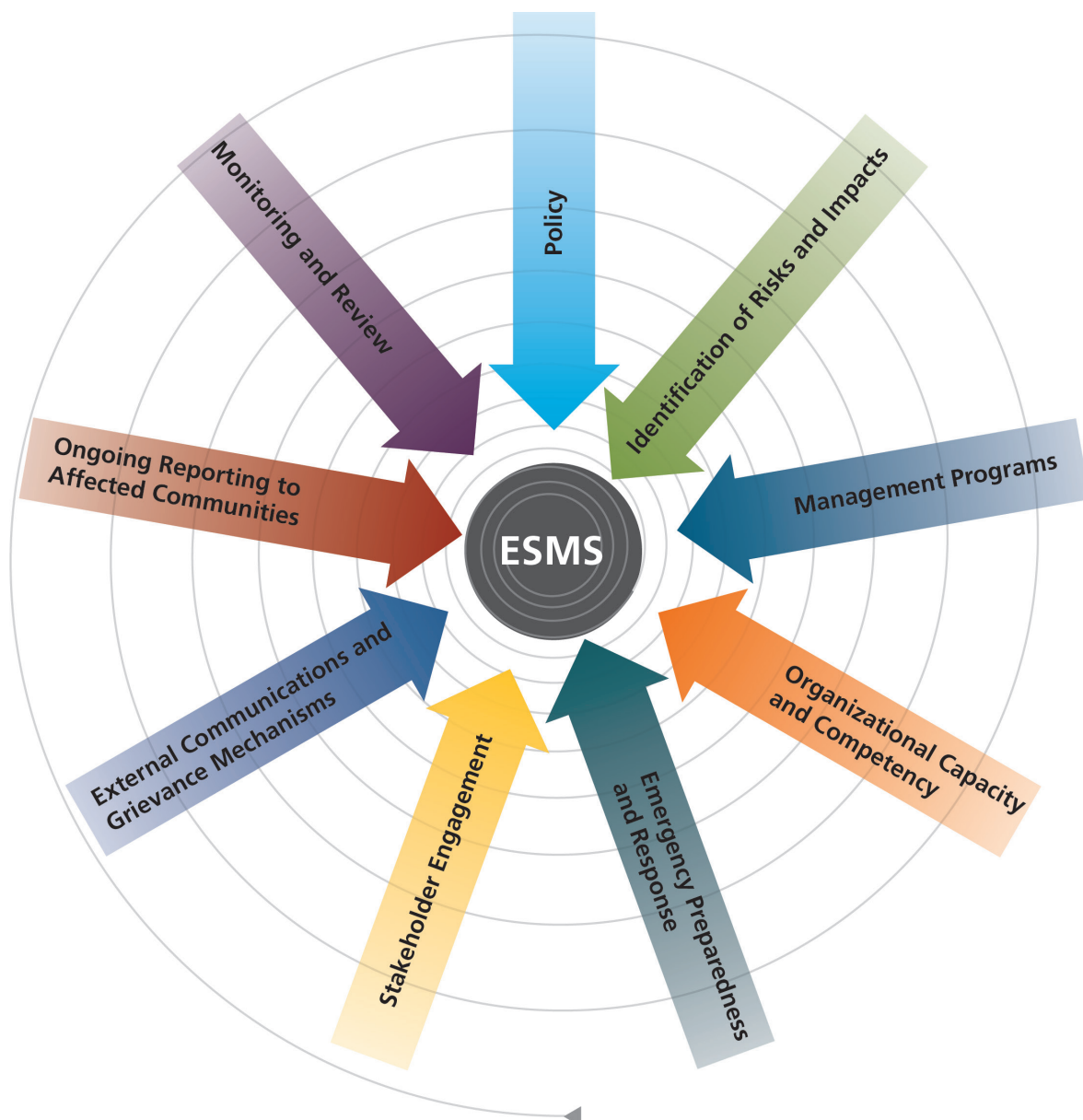
MEASURING AND IMPROVING

You can't improve what you don't measure.

Most health care facilities already have management systems for quality, safety and patient care. If your facility already has systems in place, you may already be implementing certain elements of the ESMS, and you can build on your existing systems. In this Handbook's companion publication, ESMS Self-Assessment and Improvement Guide, we provide a self-assessment rating for each of the ESMS elements. The self-assessment will allow you to measure your current level of system development and implementation. You will answer a series of questions and get your score for each element in the ESMS on a scale of 0 to 5 (5 is highest). The score measures the maturity of your system. Once you understand the maturity of your system, it is easier to target specific steps you can take to improve it.

THE SYSTEM MATURITY LEVELS (5 = HIGHEST)	
Level 5	Mature system implemented internally and with key supply chain partners – continual improvement embedded in operations
Level 4	Systems well developed and implemented internally – routine improvement projects
Level 3	Systems approach adopted, but development and implementation is inconsistent – improvement sporadic
Level 2	Limited system development with sporadic implementation – primarily reactive
Level 1	Little systems awareness or repeatable processes
Level 0	No systems awareness or repeatable processes

Policy | Identification of Risks and Impacts | Management Programs | Organizational Capacity and Competency | Emergency Preparedness and Response | Stakeholder Engagement | External Communications and Grievance Mechanisms | Ongoing Reporting to Affected Communities | Monitoring and Review

Levels of System Development & Implementaion (5 = highest)
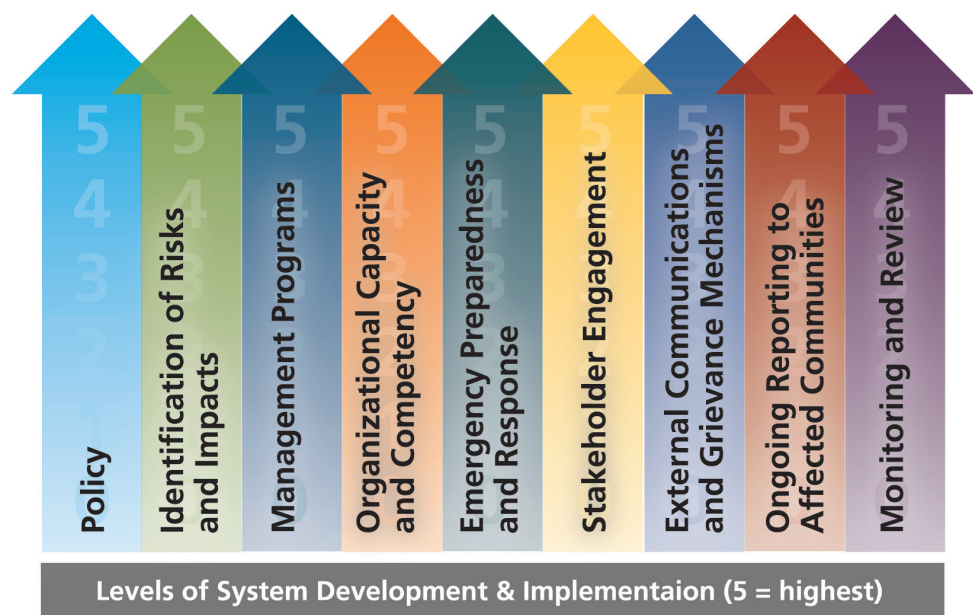
REMEMBER

A carefully developed, detailed ESMS is only valuable if it is well-implemented.

SYSTEM DEVELOPMENT AND SYSTEM IMPLEMENTATION

One of the most important things to understand about a management system is the difference between system development and system implementation. A management system is comprised of trained, committed people routinely following procedures. If you break this statement down, you see that it talks about "procedures." Procedures are the step-by-step way that people follow your policies. Procedures are the heart of effective system development.

Now let's look at the other part of the statement – "trained, committed people routinely following procedures." This is the implementation. There is a lot that goes into making it happen. Of course, some training is important to make sure that people are aware of the procedures and understand what they are supposed to do on a routine basis. But you also need to find a way to get their commitment.

One common observation is that large organizations tend to be better at system development. But they often have difficulty getting people in different locations or departments to consistently implement the procedures, despite having well-documented systems. Small organizations tend to be better at system implementation – if they have effective leadership. However, they are often weak at developing the documentation needed to ensure continuity when people in the organization change.

The approach of this Handbook and its companion publications, Toolkit and Self-Assessment and Improvement Guide, balances system development and system implementation in each of the ESMS elements.

DEFINITIONS	
System Development	The documented policies and procedures.
System Implementation	Trained, committed people routinely following the procedures.

An ESMS does not need to be complicated, but it does need to be documented and then put into practice. Some people mistakenly think a management system is just documents. But that is only a part of it. Management systems are about implementation and continual improvement.

USING THE HANDBOOK AND COMPANION PUBLICATIONS TO DEVELOP AND IMPLEMENT YOUR ESMS

The Handbook and companion publications are designed to help you measure and improve the maturity rating of your ESMS. The flowchart below shows how you can use these three publications in a cycle of continual improvement.

ESMS
HANDBOOK

ESMS
TOOLKIT

ESMS SELF-
ASSESSMENT &
IMPROVEMENT
GUIDE

• Use tools to implement
  improvement plan

• Understand the benefits of an ESMS

• Learn the nine fundamental
  elements of an ESMS

• Measure the maturity of your ESMS

• Prioritize elements and develop an
  overall ESMS improvement plan

III
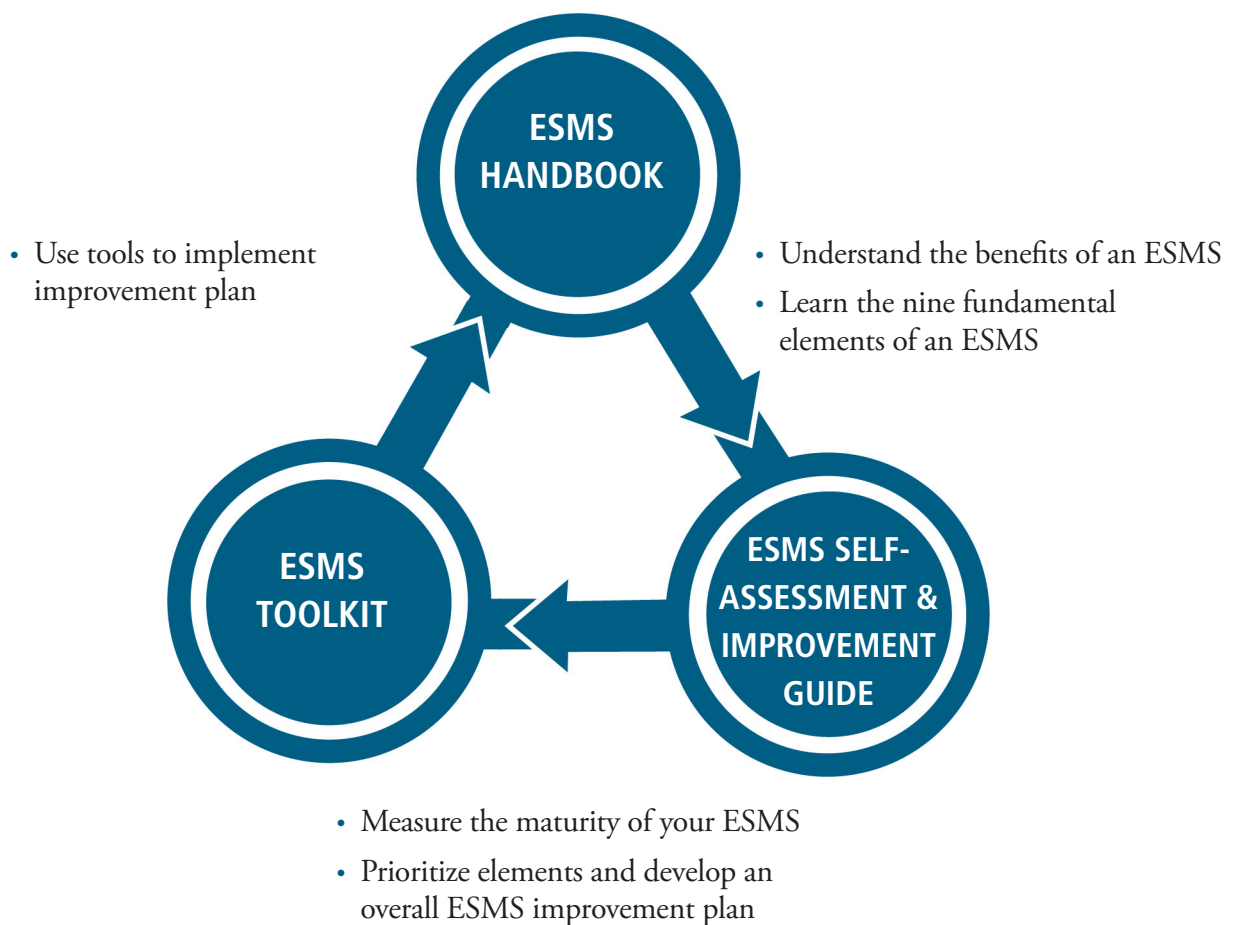
Practical Guidelines for Developing and Implementing Your Environmental and Social Management System

This section provides step-by-step instructions on how to develop and implement an ESMS.

For each element of the ESMS, we offer a quick way to measure where you are now.

 When you find a toolkit icon, it means there is a tool in the companion publication *Toolkit* to make it easier to get started.

Policy

5 E&S policies and procedures clearly communicated internally and externally. Senior management commitment to continual improvement.

4 Full set of E&S policies, procedures and records, centrally maintained and routinely reviewed. Wide awareness in company.

3 Policies and procedures in place meeting selected E&S standards. Sporadic communication, implementation and review.

2 Policies in place meeting selected E&S standards. Sporadic, conflicting or confusing procedures.

1 Limited E&S policies in place.

0 No E&S standards adopted. No related policies and procedures.

The cornerstone of your ESMS is your set of policies. Your policies summarize the commitment that your organization has made to managing environmental and social risks and impacts. They establish the expectations for conduct in all related aspects of your organization.

PURPOSE OF AN EFFECTIVE POLICY

Simply put, the policies are the rules. They tell everyone what is allowed and what is not allowed when it comes to social and environmental issues such as labor and working conditions, resource efficiency and pollution prevention, and community health, safety and security.

A good practice for writing the policies and making them understood is a Policy Statement. The Policy Statement communicates your policies to your management, staff, board, suppliers, contractors, patients and all other stakeholders. It is important for everyone to have a common understanding of the core values of the organization, how you expect people to behave and how external stakeholders can expect you to operate.

MODIFYING YOUR EXISTING POLICY STATEMENT OR CREATING A NEW ONE

The Policy Statement should be clear and simple – it does not need to be long and technical like a legal document. Many companies already have a corporate code of conduct that serves as a Policy Statement and includes issues such as ethics. You can expand your existing code to align with internationally recognized environmental and social standards for issues relevant to your organization, such as the IFC Performance Standards for Environmental and Social Sustainability.

It is important to think through the creation of the Policy Statement and tailor it to your operations. In developing your Policy Statement, be aware of the specific risks you face in your health care facility.
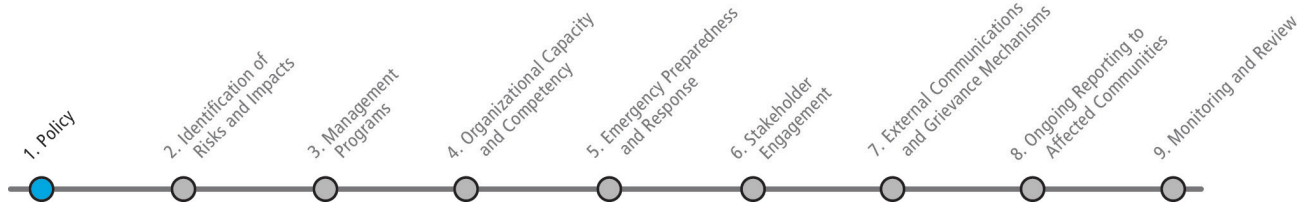
GAINING SENIOR MANAGEMENT AND ORGANIZATION COMMITMENT

Modifying or adopting your Policy Statement will require senior management support. In some organizations, it may require approval from the Board of Directors. A high level of senior management support is critical for integrating environmental and social commitment throughout all levels of your organization.

Committing to environmental and social policies probably requires some change in the behavior of your workers, contractors and suppliers. This can be challenging. There are different strategies and different techniques for changing organizational behavior, but experts agree that to create lasting change, senior management must be committed to the effort.

The first step is building awareness. There are many issues that occupy your employees' attention day-to-day. As just a written document, your Policy Statement may not get their attention or seem relevant to their daily activities. Senior management needs to make this Policy Statement come alive.

To do so, they need to communicate the importance of environmental and social issues, by making them an ongoing part of high-level Board and management discussions, public speeches, and messages to employees.

Once people are aware of the Policy Statement, the next step is building commitment – also known as "buy-in." You will probably meet resistance: "Why do we need to do this? It is too much work.   I've already got enough to do. How does this help our delivery of health care services?" Senior management needs to effectively shape and communicate the message internally and externally. They need to send a clear message that this is a long-term commitment by the organization. The key message is that this will contribute to the organization's success and that each person will benefit - but that they will also be held accountable.

> Use the Toolkit item **Checklist for Developing a Company Policy Statement** to get ideas of what you could include in your policy.

Once you have convinced people that they need to do something, senior management needs to drive implementation. They do not need to lead the effort on a day-to-day operational level, but they do need to adopt the policy and oversee the implementation plan. Resources will be necessary in order to communicate the policy internally and externally, integrate new procedures and train all relevant staff and suppliers.

> Use the Toolkit item **CEO Letter Announcing the ESMS - Internal** to get started.

Crafting the initial messages can be a good time to talk through the above stages with your senior management. Consider accompanying the Policy Statements with a message from the CEO.

> For any change initiative, think of three critical stages: Awareness; Commitment; and Implementation.
>
> Your senior management can help you to accelerate all three stages.

Identification of Risks and Impacts

The primary objective of a risk assessment is to identify the potential negative environmental and social impacts so that you can develop the appropriate strategies to address them.

In the following pages, we present the key issues that come up in health care facilities.

5 Mature system, routinely reviewed and updated as part of a continual improvement plan. Internal and external inputs. Procedures extended to contractors, subcontractors, third parties and supply chain as relevant.

4 Systematic, documented identification and prioritization of E&S risks and impacts. Routinely reviewed and updated across existing, new and changing activities. Wide awareness and engagement in company.

3 Awareness and engagement of staff in identification and prioritization of E&S risks and impacts. External experts involved as required.

2 Procedures in place for identification of E&S risks and impacts across all key activities.

1 Basic identification and assessment of E&S risks and impacts, but limited to a few activities.

0 No identification or assessment of E&S risks and impacts.

KEY RISKS AND IMPACTS IN HEALTH CARE FACILITIES

1. **Environmental: Pollution Prevention and Resource Efficiency**
   - Generation of significant volumes of general health care waste (comparable to domestic solid waste)
   - Generation and inadequate management of hazardous health care waste, which requires precise segregation and special handling and treatment. Such waste includes: infectious, pathological, radioactive, pharmaceutical, and genotoxic/cytotoxic waste, sharp items, pressurized containers, products containing heavy metals (e.g. mercury, cadmium) or persistent, bio-accumulative toxic (PBT) compounds, and chemical waste from laboratories and cleaning/disinfecting operations, such as formaldehyde and halogenated solvents
   - Air emissions from hospital waste incinerators
   - Exhaust air from infectious disease wards and other health care facilities potentially contaminated with biological agents, pathogens, or other hazardous materials
   - High energy and potable water consumption in hospital buildings
   - Leakages and spills from storage tanks for compressed gases (oxygen) and other materials stored in bulk (boiler, generator and vehicle fuels)
   - Inadequate wastewater treatment and disinfection prior to discharge, leading to surface or ground water contamination
   - Improper management of radioactive sources and retired equipment that may contain sources and/or other hazardous materials

2. Occupational Health and Safety

- Nosocomial (hospital acquired) infections among patients and staff
- Needle-sticks, surgical cuts, and other injuries posing transmission risk of blood-borne diseases such as Hepatitis C, HIV-AIDS, etc.
- Environmental services (sanitation) workers' exposure to infectious and communicable diseases
- Occupational dermatitis and allergic reactions due to workplace exposures (e.g. disinfectants and cleaning agents or latex)
- Negative impacts on mental health, due to high levels of stress
- High rates of fatigue, gastrointestinal, psychological and cardiovascular conditions, and increased injury rates due to long working hours and shift work
- Injuries from repetitive manual work (e.g. improper patient movement or cleaning activities)
- Exposure to violence, including verbal or physical assaults, from patients and their attendants
- Exposure to hazardous substances such as cytotoxic drugs, anesthetic gases, and substances used for sterilization (e.g. ethylene oxide, formaldehyde, and glutaraldehyde)

3. Labor

- Lack of oversight of recruitment agencies for nurse staffing, with associated risk of forced labor
- Lack of protection of migrant migrant workers (e.g. in-home nurses or caretakers)
- Inefficiently planned work schedules leading to excessive working hours, inadequate rest periods, and insufficient time off
- Excessive overtime not properly compensated
- Exposure to violence and sexual harassment
- Lack of awareness or due diligence of supply chain labor risks in hospital procurement processes due to focus on cost minimization (e.g. risk of child labor or forced labor in factories that produce hospital linens)

4. Community Health, Safety and Security

- Inadequate design, construction, and maintenance of facilities to assure life and fire safety in health care facilities to which the public has access
- Inadequate design, construction, and maintenance of detection and suppression systems, compartmentation, smoke control, and facility egress for patients, attendants and visitors with compromised maneuverability and mobility
- Lack of emergency potable water reserves for the community
- Air emissions, odors and mists/fumes from improper air handling leading to cross contamination and pathogen transmission
- Increased vehicle traffic around health care facilities from patients, employees and visitors leading to congestion and risk of accidents
- Increased emergency vehicle traffic and associated noise

Top 3 risks and opportunities in Health Care Facilities

1 Patients and health care providers are at risk of being exposed to infections inside health care facilities. Without proper controls in place, infections can also spread to surrounding communities. Infection control systems are required to detect cases and prevent infections from spreading.

2 Due to the demanding nature of health care work, health care providers and staff often work excessive hours. This can have negative impacts on workers' health and can also impact the quality of care that they deliver. It is important for health care facilities to be aware of the risks associated with excessive working hours so they can plan and monitor working hours and shifts appropriately.

3 Health care facilities, especially hospitals, use high amounts of energy and water in order to provide the requisite services. This use of natural resources can have serious implications on the environments surrounding hospitals. Improving energy and water use efficiency can reduce costs for health care facilities and lessen the impact on the surrounding communities.

The following are key considerations for a robust risk assessment system:

- Cover environmental, OHS, labor and community risks;

- Conduct at regular intervals – at least once a year;

- Conduct any time there are significant changes to operations;

- Conduct any time there are external changes such as new laws or regulations;

- Include input from all levels of workers and managers;

- Include input from affected communities and other external stakeholders;

- Use external consultants and experts if your staff does not have the capability;

- Assess and prioritize risks according to both the severity and probability of negative impacts;

- Consider risks in your supply chain in addition to those in your facility; and

- Scale as appropriate to the size and complexity of your business.

Now that you have an understanding of the typical risks in health care facilities, you can first use the **Risk Identification Worksheet** to identify your potential risks and negative impacts based on your operations and operating environment. Then you can use the **Process Mapping** or the **Physical Mapping** tools to identify in more detail where problems are likely to arise within your operations.

Often it is not possible or practical for you to deal with every single environmental and social impact that your facility could possibly have. You can use the **Risk Assessment Form** to prioritize which risks should be addressed first.

For more information on environmental, OHS and community risks and impacts in your industry, consult the *WBG EHS Guidelines* at www.ifc.org/sustainability.

Management Programs

Management Programs are centered on Action Plans and improved procedures to avoid, minimize or compensate for the risks and impacts that were identified.

For example, if you have a policy commitment to avoid discrimination in the workplace and you have identified this as a risk factor based on the lack of a system for employees to express their complaints, you may implement a complaint procedure as a way to minimize the risk of discrimination. Or, if one of your policy objectives is the reduction of sharps injuries, and you have identified this as a risk factor because of the high rates of occurrence, you may take action by replacing sharps with other instruments.

Verified progress against objectives and targets; significant improvements in E&S performance. Demonstrated commitment to continual improvement using annual improvement plans.

5

Routine, consistent implementation of actions/ activities to proactively manage E&S risks and impacts. Measurable company-wide objectives and targets. Periodic review and update.

4

Actions/activities in place to manage E&S risks and impacts, following the mitigation hierarchy – avoid, minimize, offset/ compensate. Proactive approach to managing issues.

3

Procedures and assigned responsibilities to address and mitigate E&S risks and impacts across all key activities. Primarily reactive.

2

A few informal programs or activities to mitigate E&S impacts. No systems awareness or repeatable processes

1

No process for mitigating E&S risks and impacts.

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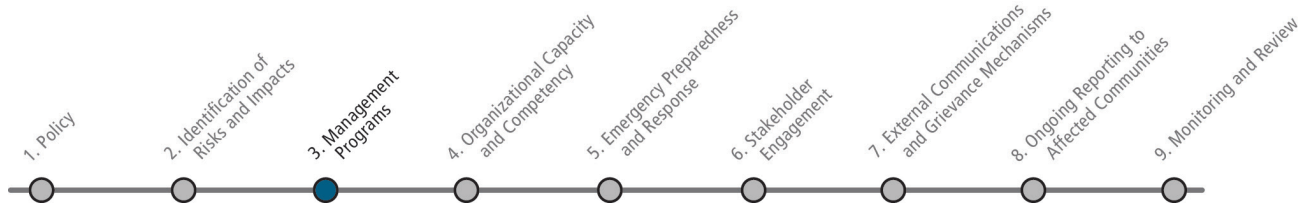
IDENTIFYING PREVENTIVE AND CORRECTIVE ACTIONS

It is good practice to emphasize preventive and proactive actions: (1) try to avoid causing social or environmental damage; (2) if not possible, then minimize the impact; (3) if not possible, then compensate or offset the damage.

First, attempt to take actions to avoid or prevent the negative impacts. For example, suppose you are expanding operations and have identified potable water as a key risk. You might change your new facility location or design it differently, so that you avoid contamination of groundwater close to home-owners and communities. Or, suppose you have identified a certain sanitation process that exposes health care workers to certain hazardous materials. You might change your processes to avoid using these materials or reduce the risk of exposure.

Prioritizing Your Actions

AVOID
▼
MINIMIZE
▼
COMPENSATE/OFFSET
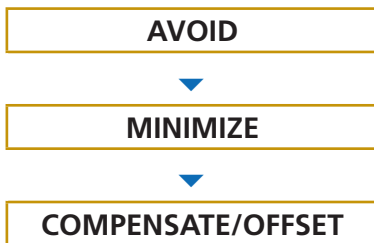
In many cases, complete avoidance is not possible – you may not be able to relocate or find alternative processes or materials. In these cases, you should try to minimize the impact. For example, suppose that you are located in an area where women are traditionally given lower status and less access to education, and in the workplace they are often mistreated by male co-workers and supervisors. Given this cultural context, it is important to be clear in your recruitment, hiring and training procedures, in order to make sure that women are hired on equitable terms and given equal access to training and promotion opportunities. You can also develop non-discrimination procedures to ensure that rules for recruitment, hiring and training are clear for everyone to follow. Additionally, you can conduct training to make sure that everyone is aware of and follows the procedures.

In some cases, it may not be possible to completely avoid or minimize certain negative impacts. Then you should find ways to offset them with comparable positive impacts or provide compensation to those impacted. For example, suppose your operation uses a large amount of water. Despite taking action to minimize water consumption, there are still periods of the year when water becomes scarce in the local community. You might collaborate with community leaders to dig new wells or provide alternate sources of drinking water.

WRITING AN EFFECTIVE ACTION PLAN

Whatever actions you decide to take, think of them as a continual improvement process - you will need to set targets, set deadlines, measure the results, and adjust the plans if necessary. You need to assign responsibilities and start to involve the right internal people and departments.

As you develop your Action Plans, these are the key questions that you need to think about:

- **What** – environmental and social risks you want to address
- **How** – related actions and procedures to be implemented to address the risk
- **Why** – reasons (objectives) for the actions and procedures, and the expected results (targets)
- **When** – timeframe and deadlines
- **Who** – responsible people

Use the Toolkit item **Action Plan Chart** to get started.

The above examples address some of the risks highlighted in the industry. These are just some of the actions that might be taken. You can adapt them to your situation and add as needed – be flexible to meet your organization's specific situation. As you tailor your action plans, consult with your workers and managers, experts and external stakeholders, including your suppliers and community. They can offer insight into important issues and effective actions. They can also help you obtain commitment for plans you are trying to implement, and provide candid feedback about how well the plans are working. This will be critical to the continual improvement of your systems.

For recommendations on how to address environmental, OHS and community risks and impacts in your industry, consult the *WBG EHS Guidelines* at www.ifc.org/sustainability.

WRITING AN EFFECTIVE PROCEDURE

Procedures serve as step-by-step instructions for workers, supervisors and managers. They allow for everyone to have a common understanding of how to behave. They enable the rules to be followed even when there is staff turn-over. Clear, detailed procedures help to embed your social and environmental policies into your daily operations.

It is a good practice to document your procedures. The key is to make your procedures as clear and as brief as possible. You can use text, checklists, flowcharts, or simple illustrations. The format for your procedure can vary depending on the audience. A written procedure may be more appropriate for managers and supervisors, while illustrations may be useful when dealing with less literate or immigrant workers. Keep your procedure as short and simple as possible.

> Use the Toolkit item **Outline of Procedure** and the **Sample Procedure Flowchart** to get started.

Simply documenting a procedure is not enough. Effective implementation is the ultimate goal. Most importantly, employees need to be aware that a new procedure exists and understand why it is important to follow. They need the skills and knowledge to be able to implement it. This is achieved through routine communication and effective training. You will learn more about this in the next chapter, Organizational Capacity and Competency.

Finally, you must ensure that your employees have access to the current version of each procedure. Out-of-date documentation should be removed or clearly marked as outdated to ensure that no one unintentionally follows the old procedure.

SHORT CASES

Here we present several short cases that illustrate some of the actions that companies can take to avoid, minimize or offset/compensate common environmental and social key risks in health care facilities. Action Plans can be scaled to the size of your facility and the nature of the risks you face.

Health Insurance and Outpatient Care Services
RISK: Improper disposal of health care waste

Kenya Health Services (KHS) Group is one of the largest providers of health insurance and outpatient care in East Africa. The Group recently restructured its operations. KHS now plans to enter the inpatient care market by acquiring two medium-sized hospitals. However, a recent study conducted by a Japanese international cooperation agency revealed that health care waste management practices at most Kenyan hospitals, including the two that KHS plans to acquire, do not comply with international requirements. Hospitals do not segregate different types of wastes and manage hazardous health care waste poorly. Health care waste is openly stored on hospital property and is not secured against pilfering and vandalism. This results in the reuse of scavenged syringes and needles, which are documented vectors for outbreaks of hepatitis A, B, and C, and HIV infections. Furthermore, hospitals often resort to open-air burning of collected wastes. This practice is a significant source of air pollution and releases dioxins, furans, and mercury. Existing facilities for adequate external hazardous health care waste management in the area, such as incinerators, are often out of order or utilized improperly. As a result, 60 per cent of hazardous health care waste is not disposed of properly in Kenyan hospitals.

IMPACT
• Contamination of local environment due to inappropriate storage, treatment and disposal of hazardous medical waste
• Release of toxic air emissions, including dioxins, furans, and heavy metals, due to uncontrolled burning of medical waste

AVOID
• Avoid hazardous waste generation at hospitals by substituting products or equipment containing hazardous materials , such as mercury, polyvinyl chloride (PVC), halogenated compounds, and carcinogenic, mutagenic or reprotoxic (CMR) substances.
• Prohibit the open-air burning of waste.
• Restrict the access to and handling of waste to trained, authorized personnel only.
• Eliminate incineration of any waste chemically treated with chlorinated disinfectants or containing chlorinated plastics.

MINIMIZE
• Develop and implement policies and procedures for the proper segregation, labeling, storage (color-coded), treatment, and disposal of waste. Waste treatment and disposal should be conducted differently according to the type of waste, such as: the incineration of pathological and microbiological waste; the shredding and landfill of contaminated plastics; the deep burial of sharps in hard wall disposal containers; and waste immobilization of unwanted pharmaceuticals.
• Maintain records of all pits used for deep burial of waste.
• Train personnel on all policies and procedures.
• Use autoclave to disinfect and treat biomedical waste as appropriate. Train staff to monitor autoclave indicators to ensure that medical waste is treated for the necessary amount of time at the correct pressure and temperature during the process.

OFFSET
• Assist in the remediation of land and water sources contaminated by hazardous medical waste streams from hospitals.

Public Hospital
RISK: Improper treatment of liquid effluents

A public hospital in Mumbai was recently issued a notice by the Maharashtra State Pollution Control Board (MSPCB) for failing to control liquid effluents from its operations. The order requires the hospital to install an effluent treatment plant (ETP). This order emanates from a study that concludes that the spread of multiple drug-resistant (MDR) bacteria may be traced to hospital effluent discharges in the municipal sewage system. In India, rampant misuse of antibiotics has contributed to the development of antibiotic resistance, and many effluent contributors do not meet pre-treatment requirements for their discharges. The study found that concentrations of MDR bacteria were alarmingly high in samples of effluents collected from five hospitals, including this hospital. The government advised the public that the spread of MDR bacteria to the community is a matter of grave concern and has instructed the hospital to address this issue. However, the hospital claims that there is not enough space or land available to build the effluent pre-treatment works and integrate the out-of-date facility sewerage infrastructure.

IMPACT

- Contamination of municipal sewage system with multiple drug-resistant (MDR) bacteria

AVOID

- Develop and implement procedures regarding the prescription and disposal of antibiotics
  - Train doctors on procedures to avoid unnecessary prescription or over-prescription of antibiotics.
  - Train other health care personnel on the proper administration of antibiotics. Health care providers should ensure that patients finish their full course of prescribed antibiotics (even if they are feeling better) so that drugs are fully effective and do not breed resistance.
  - Train cleaning and maintenance staff on the proper disposal of antibiotics.
  - Inform patients not to flush any unused drugs in the toilets.
- Develop, implement and train personnel on infection prevention and control procedures. Procedures should prevent the spread of infection between individuals through hand-washing before and after patient contact; appropriate use of alcohol-based hand rub solutions; and the use of barrier equipment such as gloves, gown, masks and goggles. Procedures should also seek to prevent microbial transmission through contaminated surfaces, such as door handles, over-bed tables, and equipment, such as stethoscopes and blood pressure cuffs.
- Conduct a water and waste audit to identify and quantify wastewater streams and wastewater contamination sources.
- Ensure that all clinical and other solid wastes are collected and disposed according to regulatory guidelines (e.g. incineration, immobilization, etc.) so that they do not interact with liquid waste streams.

MINIMIZE

- Consult with local authorities and communities to find a site for an effluent treatment plant (ETP) and install it. Since most microbiota adhere to suspended solids, focus on developing aeration, settling, flocculation and clarification processes to ensure efficiency. The settling of solids will reduce pathogens and make the chlorination efficient at lower doses to prevent any contamination after final discharge.
- Develop and implement proper procedures for the ETP and train personnel accordingly. Procedures should ensure that treated effluent is effectively chlorinated before its final discharge (e.g. chlorine dosage of 5-20 mg/L for a contact time of at least 30 minutes at pH < 7) and sludge is adequately disinfected before its final disposal. Sludge disposal must be conducted according to local regulations and laws.

OFFSET

- Work with the community and local NGOs to build awareness about proper antibiotics usage (e.g. use antibiotics only when prescribed by a doctor; do not share antibiotics with others or use leftover prescriptions) and disposal of unused drugs.
- Introduce and implement community programs to collect and dispose unused antibiotics.

Private Healthcare Group
RISK: High energy and water consumption

City Healthcare Group is one of the largest healthcare companies in Albania. The company owns and operates various large hospitals across the country and is currently in the process of modernizing most of its facilities to minimize operational costs. However, high energy and water consumption are major concerns for most of the Group's hospitals. Elbasan hospital, which has 350 beds, uses over 350,000 gallons water per day. This is significantly higher than most modern hospital facilities; the hospital has received numerous notices from a local environmental agency. Furthermore, the city of Elbasan is experiencing a growing electricity shortage. During the last winter season, most of the city experienced extensive power cuts for 12-14 hours a day. Energy restrictions and power cuts pose significant challenges for the hospital, given the strict temperature, humidity, and air quality requirements and associated demands on the hospital HVAC system.

IMPACT

- Depletion of water supply in surrounding areas
- Negative health impacts on patients and personnel due to interruption of HVAC system

AVOID

- Investigate alternative energy options to complement electricity sourced from the municipal grid. Examples include:
  - Install a suitable capacity solar panel system.
  - Install solar water heaters.

MINIMIZE

- Conduct an energy audit to identify energy-saving opportunities, such as:
  - Insulate hot water pipes to minimize heating loss.
  - Identify and seal leaks in duct systems delivering heated or cooled air.
  - Install heat exchangers to preheat incoming fresh cold air with outgoing stale heated air. Heat exchangers will work conversely during summer months, cutting down the amount of energy needed for air-conditioning.
  - Incorporate variable speed drives on fans and compressors to reduce amount of electricity used by the motors of these devices.
- Conduct a water audit to identify opportunities for water conservation, such as:
  - Install water efficient equipment (e.g. dual flush toilets or low volume showerheads).
  - Regularly fix drips and leaks.
  - Improve cooling towers management.
  - Install water-saving sterilizers or retrofit existing sterilizers.
  - Recover condensate from air handling and refrigeration units.
  - Make operational changes to improve water efficiency, especially related to cleaning practices and laundry and food preparation activities.
- Develop, implement and train personnel on water conservation policies and procedures.
- Publicize the water conservation policy to patients and visitors and increase their awareness of the need to conserve water by placing signs in throughout the hospital, especially in patient rooms and restrooms.

Private Hospital
RISK: Lack of potable water and emergency water supplies

Established in 1959, City Memorial Hospital is one of the largest and most respected hospitals in Addis Ababa with 370 beds. It aims to serve the most vulnerable populations in Addis Ababa, and has a potential patient base of 5 million people. The hospital employs over 1000 clinical and non-clinical staff and sees an annual average of 20,000 inpatients. Due to the rapid expansion and growth of the capital, demand for potable water in the city has increased drastically. This has led to a shortage of water in the city, which affects the operations of businesses and essential services like restaurants, hotels and health care facilities. City Memorial Hospital authorities often complain that the hospital receives its water supply only once a week, which forces the hospital to use chemically and bacteriologically infected water from local storage. The quality of water delivered to the hospital is also negatively impacted when city water lines are not pressurized.   To deal with the water shortage, the hospital decided to drill groundwater wells about a year ago. However, inconsistent power supply and inadequate water treatment and storage facilities make it difficult for the hospital to maintain a safe water supply for its operations.   In addition, during a recent emergency mock-drill, staff noticed that the hospital fire hydrants were not functioning due to lack of power and adequate water storage.

IMPACT

- Disruption of hospital services and adverse health impacts due to insufficient and contaminated water supply
- Spread of fire due to lack of emergency water supplies for fire hydrant system

AVOID

- Install a fire suppression water storage tank to store raw water (i.e. water prior to treatment, such as groundwater) according to National Fire Protection Association (NFPA) standards. This water can be used for fire suppression and other non-potable water applications.
- Estimate flow rate per bed and hour in normal operating conditions. Install a waste disinfection unit and potable water storage tanks that can contain sufficient water to meet the requirements for an established period of time.
- Develop and implement procedures for potable water disinfection and storage, including regular maintenance, cleaning and monitoring of the water disinfection unit and water storage tanks.

MINIMIZE

- Conduct a water audit to identify opportunities for water conservation.
- Develop and implement water conservation policies and procedures.
- Make operational changes to improve water use efficiency, especially related to cleaning practices and laundry and food preparation activities.
- Train personnel on water conservation practices and post post signs/checklists through the building about conserving water.
- Increase patient and visitor awareness of the need to conserve water by placing signs in patient rooms and restrooms and publicizing the water conservation policy.

Community Hospital
RISK: Contamination of indoor air

Country Hospital is one of the oldest hospitals in Antipolo City, Philippines. The 150 bed hospital is owned by a local Trust and has been known for providing quality health care services to the local community for more than a century. For the last several months, hospital employees and patients have been complaining of poor air quality, stuffiness, and unpleasant odors, accompanied by symptoms of eye, nose, and throat irritation and nausea. Absenteeism among the staff is on the rise, which often results in the disruption of essential services during outpatient department hours. Concerned with the growing patient complaints and disruption in essential medical services, the Hospital Administrator recently consulted the Maintenance Manager, who suggested that the problem may be due to HVAC system inadequacies, such as a deficiency of air exchanges, poor air distribution, poor thermal control, and inadequate maintenance procedures. The Maintenance Manager created a team to further investigate the issue and implement suitable control measures. Upon careful investigation, the team discovered several other issues including cross contamination from the underground parking garage, infectious disease wards, food preparation area, sterilization units, and operating rooms. These issues are contributing to the indoor air quality problems in the hospital.

IMPACT
• Negative health impacts on personnel and patients due to poor indoor air quality

AVOID
• Implement an inspection and preventive HVAC maintenance program to prevent re-occurrence.
• Develop and implement policies and procedures related to the cleaning and servicing of the HVAC system. Regularly drain, clean and replace HVAC components (e.g. drain pans, ducts, air dampers, cooling towers, filters, etc.) to minimize the potential for microbial growth or contamination.
• Review and modify the orientation of air intakes and exhausts to eliminate cross-contamination from local pollution sources, such as parking areas, garages, loading zones and cooling towers.
• Relocate intake points or consider adding specialized filtration, such as activated carbon.
• Ensure that the minimum outside air damper settings are enough to provide adequate amounts of outside air and that these are not being closed inappropriately for energy efficiency.
• Determine pressure relationships within the facility and implement engineering controls (air flows from positively pressurized to negatively pressurized spaces).

MINIMIZE
• Train appropriate personnel to monitor air quality levels regularly and make the necessary adjustments in the HVAC system as required.
• Monitor carbon dioxide levels regularly and determine the adequacy of the outside air supply.
• Monitor carbon monoxide levels regularly as an indicator of the infiltration of combustion byproducts.
• Monitor respirable suspended particles as an indicator of filtration effectiveness.

OFFSET
• Provide timely medical treatment to affected personnel and patients.

Public Psychiatric Hospital
RISK: Unsafe food preparation

A state-owned psychiatric hospital has 320 employees and 128 patient beds. More than forty people recently were affected by an outbreak of food poisoning. The illness was caused by food contamination with Clostridium perfringens, which is found on raw meat or poultry. C. perfringens is the third most common cause of food poisoning in the United States. Though it can sometimes be safely ingested, C. perfringens forms spores that can withstand cooking temperatures and can germinate to develop infective bacterial colonies. This outbreak was traced to a contaminated chicken salad that was served to patients and staff. The contaminated salad was likely prepared hours in advance of being served and stored at an inappropriate temperature. The mishandling of the prepared food created an environment in which the bacteria could grow and then infect those who consumed the affected food.   Subsequent investigations highlighted severe deficiencies in the food preparation services at the hospital.

IMPACT

- Bacterial gastroenteritis (food poisoning) among staff and patients due to improper food storage and preparation.

AVOID

- Establish a Hazard Analysis and Critical Control Points (HACCP) program.
- Establish and implement standard criteria for the purchase of food and food handling equipment.
- Develop and implement procedures for food handling and storage, and for cleaning and disinfection of food handling equipment in order to avoid microbial contamination and maintain a high level of food safety. Any food that is past a certain preparation time or date, or otherwise suspected of being contaminated, must be discarded.
- Assign a responsible, trained person to oversee food preparation and handling. He or she shall monitor food preparation personnel to ensure that they follow safe food handling and storage procedures and regularly clean and disinfect food handling tools and equipment.
- Conduct periodic, mandatory training for food preparation personnel on food handling procedures to prevent contamination

MINIMIZE

- Ensure that all water used for drinking or food preparation is appropriately filtered and purified for potability.
- Dispose of any chipped, broken or cracked eating or drinking utensils.
- Seal all holes in the building to ensure pests cannot gain access to the building and implement a pest control system.
- Post signs with food handling instructions in food preparation areas.

OFFSET

- Provide medical care and timely assistance to affected persons.

Private Hospital Network
RISK: Needlestick and sharps injuries

The largest network of private hospitals in Brazil includes 23 hospitals and 30 oncology clinics, as well as urgent care clinics, research institutes, and corporate offices distributed throughout the country. This network includes over 30,000 staff members.   Thousands of affiliated specialists also utilize facilities in the network with their own surgical and support personnel. Despite a comprehensive management system and 168 Occupational Health and Safety staff, hospitals in the network are experiencing high rates of lost-time due to workplace injury, especially from the recurrence of preventable incidents such as cuts and punctures from sharp instruments. These accidents have been primarily attributed to the large number of affiliated specialists who are not included in the network's management system. One recent case resulted in the transmission of HIV to a member of the nursing staff. This unfortunate event raised potential issues about the effectiveness of the hospitals' occupational health and safety system.

IMPACT
• Transfer of diseases among health care personnel

AVOID
• Develop, implement and communicate policies and procedures for affiliated specialists' personnel. Policy may require affiliated specialists to use trained hospital personnel.
• Utilize engineering controls to eliminate personnel exposure, including the use of safer medical devices, such as: needles that are able to retract, sheath or blunt immediately after use; needleless IV connectors; and safety lock winged needles.
• Eliminate the use of the following devices when possible: hollow bore needles; needle devices that need to be pulled apart by the health care provider; needles that are left exposed on a syringe after use; and needles attached to tubing, such as butterflies, that can be difficult to place in sharps containers.

MINIMIZE
• Develop and implement policies and procedures to decrease injection use and eliminate the use of unnecessary sharps, such as towel clips during surgery.
• Prohibit the recapping of used needles and ensure that used needles are disposed in sharps containers after use.

• Ensure that sharps containers are available in all areas where sharps are generated and easily accessible to all personnel. Sharps containers should:
  • Be placed no higher than 54 inches from the floor
  • If not wall-mounted, be in close proximity to the work site to prevent injuries while sharp objects are being transported to the container
  • Be closable, puncture-resistant, leak-proof, spill-proof and free of contamination
  • Be changed when they are three-quarters full so that needles never need to be forced into the container

• Train all personnel, including affiliated specialists, on safe work practices for handling sharps and provide specific instructions for when sharps must be used. Safe work practices include using instruments to hold needles; using verbal cues while passing sharps; avoiding hand-to-hand transfer of sharps by placing them in a neutral designated area for retrieval; minimizing splash or splatter; and double gloving.
• Post signs in work areas detailing steps to avoid preventable sharps-related injuries.

OFFSET
• Provide adequate vaccination and treatment to protect workers at risk of bloodborne pathogen exposure from infection.
• Promptly obtain serological testing of source patients where necessary and begin post-exposure prophylaxis within four hours of exposure.
• Ensure counseling, testing and treatment is available to personnel 24 hours a day in case of occupational exposure.
• Follow standardized procedures in case of exposure to HIV or Hepatitis C, with repeated serological investigations for up to one year.
• Provide compensation to affected workers in accordance with local and national regulations.

Public Hospital
RISK: Excessive mandatory overtime

A large public hospital in South Africa with 1,300 beds and almost 500,000 patients annually has 2,000 staff, including 750 nurses and 400 doctors. The nationwide nursing shortage impacted this hospital, leaving it with almost 40% fewer nurses than required for its size.   As a result, nurses are forced to work excessive overtime hours. Approximately 30% of the nurses receive up to 30% of their salary in overtime pay, in violation of the national labor law. Furthermore, record-keeping is inconsistent, which leads to failures in overtime recording. As a result, it is not possible to determine if the hospital is making sufficient overtime payments consistently. One nurse claims to have worked 187 overtime hours in a month, including one shift that lasted 22.5 hours without breaks. The overtime work is mandatory and nurses have been threatened with dismissal if they refuse to work extra hours. These extra hours of work are also dangerous for both patients and personnel, since overworked staff can make serious mistakes due to fatigue.

IMPACT
• Worker fatigue and potential for workplace injuries and improper patient care

AVOID

• Establish, communicate and implement policies and procedures for working hours in keeping with industry standards and national laws, including provisions for overtime work, shift work, work at inconvenient times and on-call duty:
 	
   • Normal working hours should not exceed eight hours a day, unless there are exceptions in national law, collective bargaining agreements or other sources.
 	
   • Overtime should not exceed 4 hours a day (for a maximum of 12 working hours per day).
 	
   • Overtime should not be mandated on a regular basis.
 • Allow workers to refuse overtime without penalty.
 • Workers should receive 24 hours of continuous rest each week. Shift workers should receive 12 hours off between shifts.
 • If recruiting nurses from other countries to compensate for the domestic nursing staff shortage, follow international and national laws in the recruitment process. Ensure that all migrant nurses can move freely within and outside the country, and that they are treated fairly and equally to national personnel.
 • Partner with government and teaching institutions to recruit and train nurses and nurse's aides.
 • Identify tasks that can be transferred to other workers; recruit, hire, promote and train additional workers

MINIMIZE

- Train senior management, supervisors and workers about labor regulations regarding working hours and the linkages between excessive overtime and increase risk of workplace injury or illness and improper patient care.
- Avoid scheduling tasks that are demanding, dangerous, safety-critical or monotonous during the night shift, particularly during the early morning hours when workers' alertness is lowest.
- Limit the scheduling of consecutive shifts to a maximum of 3 days for long work shifts (over 8 hours), night shifts and shifts that begin early in the morning.
- Limit day shifts to a maximum of 12 hours (including overtime) and night shifts to 8 hours. Consider the needs of pregnant and older nurses, since they may be more vulnerable during night shift work and working long hours.
- Plan appropriate workloads for the length and timing of each shift. Schedule a variety of tasks to be completed during each shift to create a more dynamic working environment and increase workers' alertness.
- Develop and implement policies and procedures for improved record-keeping of working hours.
  - Monitor working hours records on a continuous basis and adjust work planning as needed.
  - Ensure all overtime is recorded and paid at premium rate.
- Implement an employee grievance mechanism and complaint resolution procedure for addressing worker concerns about excessive working hours or other issues.
- Modify the timing of shifts or create more flexible working schedules to cover gaps in coverage and prevent excessive overtime and extended work shifts.

OFFSET

- Retroactively compensate workers for overtime work at the established overtime premium rate.
- Consider implementing a "time in lieu" (time off) system at a premium rate to compensate for overtime hours.
- Provide adequate breaks and rest facilities.
- Provide suitable medical assistance or counseling to workers suffering from fatigue or work-related stress.

Nursing Staffing Agency
RISK: Mistreatment of temporary migrant workers

One of the largest European temporary professional staffing agencies was recently exposed by a newspaper as having forced its temporary nursing employees, the majority of whom are migrants from North Africa, to work up to 84 hours a week without overtime pay.   In addition, the agency is accused of withholding workers' identification documents and passports. The workers were threatened with deportation and wage deductions if they complained about this working arrangement. Since they had to pay down their debt for high recruitment fees, the workers felt they had no choice but to work the long hours required by the agency, even though this was in violation of national working time regulations. The Agency Director admitted that he was aware of the employees' working conditions and is now facing complaints by the Labor Inspection Authority. The police have also filed charges against the agency.

IMPACT
• Forced labor due to withheld identification documents and high recruitment fees
• Negative health impacts on workers due to excessive overtime

AVOID
• Establish, communicate and implement policies and procedures on hiring, remuneration, terms of employment and working hours, especially for migrant workers.
• Working hours policies should include the following:
• Normal working hours should not exceed eight hours a day, unless there are exceptions in national law, collective bargaining agreements or other sources.
• Overtime should not exceed 4 hours a day (for a maximum of 12 working hours per day).
• Overtime should not be mandated on a regular basis and should be paid at a premium rate.
• Workers should be allowed to refuse overtime without penalty.
• Workers should receive at least one day off in every seven consecutive days worked.
• Train personnel on procedures to ensure that they are understood and implemented.
• Revise organization policies so they prohibit the withholding of workers' original documentation, including identification documents or passports.
• Charge recruitment fees to employers so that workers are not required to pay excessive fees, which may force them into debt bondage.

MINIMIZE
• Limit overtime hours to the legal amount and pay premium rate for overtime hours worked.
• Regularly conduct internal audits to ensure compliance with local and international law.
• Ensure that all workers understand their rights, including wages, benefits and deductions. This may necessitate the translation of materials into workers' native language.
• Ensure that all workers have access to their contracts in a language they understand. Distribute pay stubs with clear calculations of payments and deductions when wages are paid.
• Implement a non-retaliatory grievance mechanism and complaint resolution procedure to address worker concerns about excessive working hours, payment or other issues. Workers should be able to submit complaints confidentially or anonymously.

OFFSET
• Pay back-wages for overtime hours worked at a premium rate.
• Reimburse workers for recruitment fees.

Public Hospital
RISK: Improper infection control

Lapses in hospital infection control measures at a public hospital in Egypt recently exacerbated an outbreak of a deadly viral disease that infected more than 60 people and resulted in 10 fatalities. Epidemiologists have said that the spread could have been kept under control if the country's officials and scientists had collaborated earlier on detailed analyses of viral transmission, the disease's etiology (origin/cause), current incidence and prevalence of the disease, as well as geographical distribution. This data is essential to design and implement prevention measures. Previous viral outbreaks, such as SARS, were contained effectively because epidemiologists and clinicians around the world worked together to create an effective response in a relatively short period of time (6 months). One health expert emphasized the importance of implementing robust infection control procedures in hospitals as well as institutionalizing data collection and analysis. The public hospital must incorporate these activities into its daily operations so that the virus is not transmitted from patient to patient or from patients to health workers.

IMPACT

- Spread of disease to the local community, with potential for fatalities, especially in vulnerable populations

AVOID

- Develop and implement procedures for infection control to limit the transmission of organisms between patients, and between patients and staff. Procedures should include instructions for adequate hand-washing, glove use, appropriate aseptic practice, isolation strategies, and sterilization and disinfection practices.
- Restrict visitor and staff interaction with infected patients. Restrict patient movement through the hospital.
- Develop and implement procedures for the early detection of cases, especially by screening patients admitted from other hospitals and high-risk patients.
- Protect patients with appropriate use of prophylactic antimicrobials, nutrition, and vaccinations.
- Work with the local authorities and community to develop, communicate and implement preventative public infection control policies that encourage the following behavior:
  - Wash hands often with soap and water for 20 seconds. If soap and water are not available, use an alcohol-based hand sanitizer. (Ensure that young children are taught proper hand washing practices.)
  - Cover nose and mouth with a tissue when coughing or sneezing.
  - Avoid touching eyes, nose and mouth with unwashed hands.
  - Avoid personal contact with ill individuals.
  - Clean and disinfect frequently touched surfaces, such as doorknobs.

MINIMIZE

- Treat blood and body fluids from all patients as infectious, whether or not an infection has been confirmed. Utilize appropriate disposal techniques to prevent further spread of infection.
- Ensure that all personnel wear appropriate personal protective equipment (PPE), including gloves, gowns, and eye and face protection. Provided PPE in adequate sizes and quantities for personnel.
- Monitor and evaluate individuals who come in close contact with someone that has developed the virus for 14 days.
- Work with local authorities to improve cooperation and information-sharing locally, with other countries, and with international health organizations:
  - Increase lab testing capacity to detect cases of the disease.
  - Assist in the development of guidance and tools for health departments to conduct public health investigations when disease cases are suspected or confirmed.
  - Provide recommendations for healthcare infection control and other measures to prevent spread of disease.
  - Assist in the dissemination of up-to-date information about the disease to the general public, international travelers, and public health partners.
  - Cooperate with other facilities to implement Advanced Molecular Detection (AMD) methods for rapid detection of pathogens and timely treatment.

OFFSET

- Provide timely medical care to affected persons.
- Work with local authorities and other hospitals to develop quarantine and disease response containment procedures and training.

Organizational Capacity and Competency

A well-implemented ESMS is ultimately about trained, committed people. How do you make that happen?

ROLES, RESPONSIBILITIES AND AUTHORITIES TO IMPLEMENT THE ESMS

First, you need senior management commitment. Senior management commitment starts with adopting the ESMS policies, but it must go beyond that. Senior management support is critical to implementing a sustainable ESMS. It is the responsibility of senior management to lead the effort. They don't have to lead the effort on a day-to-day basis, but they do need to send a clear message, to all employees at all levels, that this is a long-term commitment by your organization.

Beyond senior management commitment, you need a team that takes responsibility for the ESMS. This does not need to be a full-time job for anyone, but senior management needs to ensure realignment of reporting duties, allocation of appropriate time and authority to carry out the work involved.

A well-balanced ESMS Team is a prerequisite for meaningful engagement with your peers and colleagues. It should include knowledgeable professionals from environment, health and safety, operations or production, contracts and purchasing, human resources, for example.

In fact, the success of a management system depends on departments that have traditionally been seen as beyond the reach of environmental and social issues, such as human resources, procurement and maintenance. For example, human resources manages training needs related to the labor aspects; procurement manages the qualifications and performance of suppliers and contractors; and maintenance ensures that the equipment runs efficiently and that spills, leaks and other emergency situations are minimized.

The ESMS Team should not work in isolation when identifying risks and impacts, developing improved procedures, designing actions plans, etc. To be truly effective, the ESMS Team needs to consult with people from all levels of the organization, including supervisors and workers, as they are key frontline identifiers of problems.

5 All levels of the company are trained and engaged – multiple units and workers as well as managers. E&S staff has implementation authority. Management commitment is reflected in resources devoted to E&S management and training.

4 Multiple units have E&S responsibilities, and senior management is involved. E&S is managed as an inte- grated system. New staff receives some E&S management guidance.

3 All levels of the company are involved in aware- ness training. E&S roles and responsibilities are assigned and part of daily operations. E&S staff is trained and competent.

2 E&S roles are defined and assigned. Each issues is handled only by one func- tional area. Some aware- ness training is provided at orientation and addi- tional training is provided for EHS staff.

1 No assigned staff with E&S management respon- sibilities. Some limited awareness and E&S roles and responsibilities start- ing to get defined. No systems awareness or repeatable processes.

0 No internal awareness and no formally assigned responsibility for E&S.
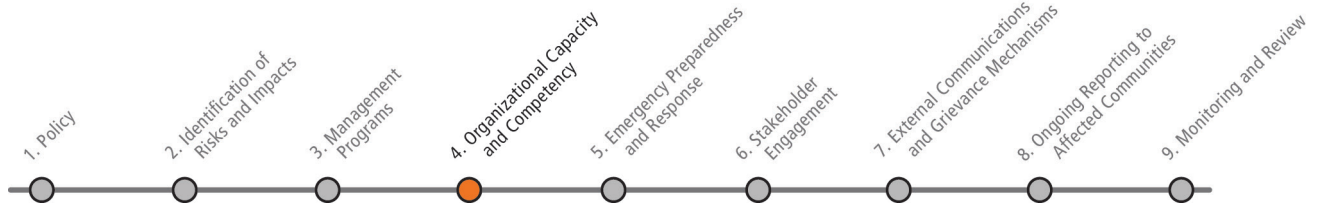
As with the overall management system, the team should be scaled to the size and complexity of your organization. Your organization might not have multiple departments with distinct roles; maybe a few people cover several functions. The key is to involve people across the range of functions. If a team already exists in your facility (e.g. fire safety team) consider building your ESMS Team upon it.

Once the ESMS Team is selected, the team members need to select a team leader. This is an important role, especially in the beginning. The team leader needs to set the tone for the group and keep people motivated. All new initiatives face hurdles, and developing and implementing an ESMS is no exception. The team leader needs to help the team overcome the inevitable hurdles, and should have direct access to senior management.
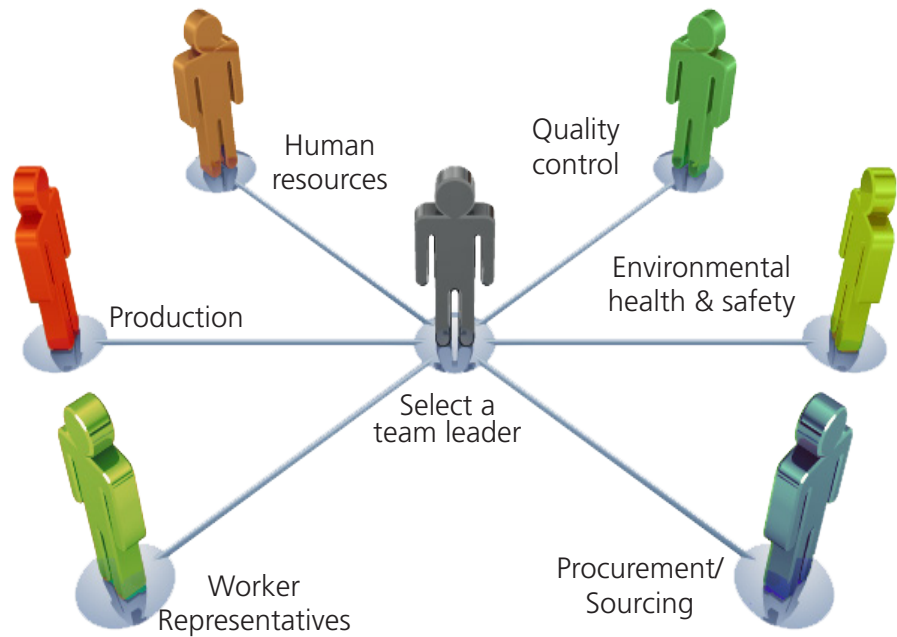
> Take a look at the Toolkit item **Roadmap and Time Estimate for Developing and Implementing an ESMS** in the Toolkit for a list and sequencing of activities to develop and implement an ESMS.

When selecting a team leader, look for someone who has the following qualities:

- communicator;
- problem-solver;
- project manager;
- pragmatic; and
- respectful to all.

EXAMPLE OF AN ESMS TEAM

Human resources

Quality control

Production

Environmental health & safety

Select a team leader

Worker Representatives

Procurement/ Sourcing

COMMUNICATION AND TRAINING

Now that you have identified the actions to be taken and updated your procedures, you need trained, committed people who follow the ESMS procedures. This is the end goal of communication and training.

There are three key steps that build on each other:

1. **They need to be aware of the ESMS.**
   - What is it?
   - What are its goals?
   - What do I need to do?

2. **They need to understand that the ESMS is necessary and will improve the organization.**
   - How does this help our organization?
   - How does it help my department?
   - What will change?
   - What is in it for me?

3. **They need to obtain the skills and knowledge to be effective in their roles.**
   - What are the new policies and procedures?
   - What exactly do I need to do?
   - How do I do that?
   - What will happen if I don't do it?

Effective Communication and Training

Ask yourself if the goal of this specific communication or training module is to build awareness, to gain commitment and/or give people the knowledge and skills needed to implement.

Your ESMS Team needs detailed training to develop the necessary knowledge and skills. They will need to understand the basics of the Plan-Do-Check-Act cycle and know the nine elements of an ESMS. This Handbook provides the information they will need, but additional help may be necessary. In addition to the detailed training of the team, everyone will need to receive awareness training so there is a shared understanding of the goals of the ESMS.

The chapters in this Handbook provide an easy way to structure efficient general training. You can give everybody an overview about what you have learned here about developing and implementing an ESMS.

You may also need to provide training that is specifically related to your Action Plan and new operating procedures.

Examine the specific actions and who is going to be involved. This is a quick way to determine what training will be needed by the various departments and people in your organization. Ask yourself what knowledge and skills do people need to effectively implement new procedures, carry out allocated responsibilities and complete the action plan.

Use the Toolkit item **Training Plan Worksheet** as template and tie it to your Action Plans and improved procedures.

AWARENESS　　**COMMITMENT**　　**IMPLEMENTATION**

Emergency Preparedness and Response

5 Regular engagement with local community and government for onsite and offsite emergency plan. Formal resource-sharing agreements with neighboring companies.

4 Senior management and all units and shifts, including contract and temporary workers, participate in emergency risk assessment, preparedness planning and mock drills. Continual improvement.

3 All onsite and off-site emergency issues have been identified and an effective preparedness plan is in place. The plan meets the local regulatory requirements and the local industry best practices.

2 The emergency preparedness plan is in place, but there is no evidence of consistent implementation. Some trainings are provided to the workers on emergency requirements.

1 Emergency management planning is not effective, as all emergency risks have not been identified. Occasional trainings are provided to workers.
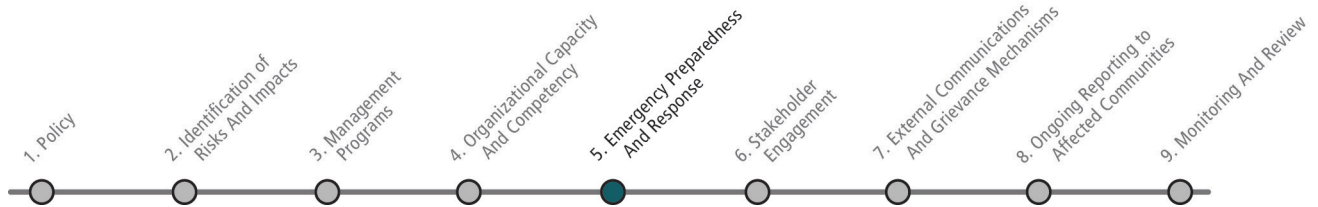
0 Very limited emergency control and personal protective equipment. No formal plan in place.

Even when you have considered all the risks and put the appropriate management programs in place, accidents and emergency situations can happen.

Your organization is a dynamic operation, and many things change from day to day – people go in and out of your workforce, materials and suppliers enter and exit your supply chain, patients are admitted and discharged from your facility, and equipment are added to and removed from your facility. A management system will help to maintain continuity and consistency throughout these changes. However, there may be a momentary lapse or gaps in the system (e.g. someone not properly trained, someone not following the procedures, a machine breakdown), or an external force (e.g. natural disaster) that can lead to an accident or emergency situation at your facility. While it is not always possible to prevent such situations, you can be prepared to respond effectively to prevent and mitigate any harm to your patients, community and the environment.

1. Policy
2. Identification of Risks And Impacts
3. Management Programs
4. Organizational Capacity And Competency
5. Emergency Preparedness And Response
6. Stakeholder Engagement
7. External Communications And Grievance Mechanisms
8. Ongoing Reporting to Affected Communities
9. Monitoring And Review

The key to effective response is effective preparation. The following steps will help you to anticipate the possible scenarios and prepare accordingly:

- Identify the areas where accidents and emergency situations may occur, and communities and individuals that may be impacted. This should begin during your overall risk and impact assessment, through your process analysis, physical mapping and consultations with workers, experts and the community.

- Develop response procedures for each identified emergency situation that clearly explain what actions need to be taken. These need to be detailed clearly for everyone in your facility to understand what he or she needs to do.

- Provide the necessary equipment and resources to effectively implement the response plans. A stockpile of fire extinguishers does not put out fires, unless people can effectively find and use them when needed. Think about equipment that is easy for people to use and is located where it can be immediately accessed during accidents and emergencies.

- Assign responsibilities so that each activity has people responsible for carrying it out. Also designate people who will routinely analyze how well the system is working and update the risk assessment and plans.

- Communicate so that everyone in your facility understands the importance of the emergency preparedness and response system and is encouraged to help monitor and improve its effectiveness. Also include people in the community who may be affected, if it is appropriate.

- Provide periodic training so that everyone in your facility has an overview of the system, and knows the response plans. Don't just lecture about what to do – ask for and obtain input on what needs to be addressed and what can be improved. Even with the most detailed procedures and plans, people will need to exercise individual judgment and adapt to quickly changing situations. This is more likely to happen if you engage people in all aspects of the system beforehand.

- Work with government agencies and community groups to identify areas where you can collaborate to respond effectively to internal and external situations.

- Conduct periodic checks and drills to test how well the system is working and to re-assess the risks to reflect changing conditions. Incorporate your findings to continually improve your system.

- Remember, it is essential that the emergency response plan be site specific. Even if you have similar operations at two different sites, it does not mean that the same emergency plan would be effective at both locations. An emergency response plan at each site should be independently reviewed for its suitability and effectiveness.

Look at the **Sample Fire Response Procedure** and **Sample Chemical Spill Response Procedure** Flowchart for examples.

An Emergency Preparedness and Response Plan should include:

- identification of potential emergencies based on hazard assessment;

- procedures to respond to the identified emergency situations;

- procedures to shut down equipment;

- procedures to contain and limit pollution;

- procedures for decontamination;

- procedures for rescue and evacuation of staff and patients, including a designated meeting place outside the facility and strategies to relocate patients in need of continual monitoring and care;

- location of alarms and schedule of maintenance;

- list and location of equipment and facilities for employees responsible for responding to the emergency (fire-fighting equipment, spill response equipment, personal protection equipment for the emergency response teams, first aid kits and stations);

- protocols for the use of the emergency equipment and facilities;

- schedule for periodic inspection, testing and maintenance of emergency equipment;

- clear identification of evacuation routes and meeting points;

- schedule of trainings (drills), including with local emergency response services (fire fighters);

- procedures for emergency drills;

- emergency contacts and communication protocols, including with affected communities when necessary, and procedures for interaction with the government authorities;

- procedures for periodic review and update of emergency response plans.

Common OHS Hazards and Emergency Situations in Health Care Facilities

Occupational Health and Safety (OHS) hazards in the workplace can be divided into five categories: physical, chemical, biological, ergonomic and radiological.

You should identify the specific hazards that are relevant to your facility's operations during your risk assessment, using methodologies such as job safety reviews or job hazard analyses. The results of these analyses and the tasks required to mitigate the identified hazards should be incorporated into action plans, which also stipulate the assigned responsible staff and expected timelines for completion.

Your management program should seek to first avoid negative impacts from each hazard, by eliminating or substituting the equipment, material, or work practice that is causing the hazard. If it is not possible to eliminate the hazard, you should seek to minimize its impacts by instituting engineering controls (e.g. by installing machine guards or active ventilation) and administrative controls (e.g. job rotation, clear work instructions or warning signage). You should also provide technically appropriate personal protective equipment (PPE) and train your personnel on the appropriate use and maintenance of supplied PPE.

OHS emergency situations often occur because of gaps in a management system. Thus, even though the hazards may seem to be very different, such as slips and falls on spilled liquids vs. exposure to radiation, they are often the result of the same root cause – ineffective implementation of the ESMS. The tables below describe common workplace hazards and their associated potential impacts. They also illustrate how inadequate implementation of any of the 9 ESMS elements can be the root cause of such situations. The examples below are not an exhaustive list of root causes. You should identify gaps in your own system to determine potential root causes of problems during your risk assessment.

PHYSICAL HAZARDS	
Examples	**Potential Impacts**
• Slipping on wet floors, spilled liquids or bodily fluids • Interaction with unguarded or improperly operated machines (e.g. kitchen equipment) • Handling hot or sharp items from autoclaves or sterilizers • Exposure to high noise levels (e.g. in laundry area) • Exposure to high temperatures (e.g. in laundry area or kitchen) • Use of medical lasers • Touching faulty or damaged electrical cords or wires • Involvement in a vehicular accident (e.g. due to traffic near the emergency entrance) • Violent assault from patients or their attendants • Ignition of medical (e.g. oxygen hood or cauterizing devices), lighting or cooking equipment • Explosion of medical gas cylinders	• Sprains and strains • Fractures • Cuts and amputations • Burns and scalds • Hearing threshold shifts and loss • Heat stress, dehydration, heat stroke • Eye injuries • Electric shock or electrocution • Asphyxiation and burning in case of fire • Death Fires or explosions from ignited equipment or gas can lead to massive loss of life and destruction of property.

Potential Root Causes		
Management Program: • Lack of, inadequate, or improperly implemented safety procedures and equipment procurement and maintenance	**Monitoring and Review:** • Lack of tracking of accidents and near-misses	**Organizational Capacity and Competency:** • Insufficient worker training on safety procedures • Failure to assign a responsible party for managing safety hazards • Failure to train contract or temporary workers

CHEMICAL HAZARDS

Examples	Potential Impacts
• Exposure to hazardous drugs through inhalation, skin contact, skin absorption, ingestion or injection • Exposure to hazardous vapors, fumes or gases (e.g. mercury, ammonia, formaldehyde, ethylene oxide, waste anesthetic gases) • Skin contact with hazardous chemicals (e.g. sterilizers and disinfectants, such as glutaraldehyde). • Prolonged exposure to latex • Ignition of improperly stored and handled flammable substances (e.g. ethylene oxide)	• Headaches, nausea, dizziness • Decreased mental abilities • Skin irritation and burns • Irritation of eyes, nose and throat • Respiratory disorders • Damage to internal organs • Damage to nervous, immune, and reproductive systems • Cancer • Allergic reactions • Asphyxiation or burning in case of fire • Death

Potential Root Causes

Emergency Preparedness and Response:	Management Program:	Monitoring and Review:
• Lack of or inadequate emergency response plan in case of extreme chemical exposure • Insufficient or ineffective worker training and mock drills	• Use of incompatible or damaged storage containers • Uninformed or incorrect labeling • Insufficient monitoring of allowable chemical concentrations in the workplace • Inability to follow Material Safety Data Sheets instructions • Inadequate PPE	• Fail to monitor and review work practices to ensure that chemical safety procedures are being followed and improved as needed

BIOLOGICAL HAZARDS

Examples	Potential Impacts
• Exposure to bloodborne pathogens (e.g. hepatitis B or C and HIV) or other bodily fluids that may carry diseases (e.g. Ebola or methicillin-resistant Staphylococcus aureus) • Exposure to nosocomial infections • Needlestick and sharps injury • Exposure to surgical smoke plume • Exposure to foodborne illness due to contaminated food (e.g. E-coli or salmonella)	• Debilitating diseases among workers and patients • Death • Spread of diseases among local communities impacting public health and local economic productivity

Potential Root Causes

Management Program:	Stakeholder Engagement:	Monitoring and Review:
• Lack of or inconsistent hand-washing methods • Failure to use universal precautions • Improper labeling, storage or mishandling of biological materials, needles and sharps • Ineffective exposure control plan • Inadequate PPE	• Lack of or inadequate stakeholder engagement to address potential spread of diseases within the facility or to the local community	• Failure to monitor and review work practices to ensure that safety procedures are being followed and improved as needed to address biological risks

ERGONOMIC HAZARDS

Examples	Potential Impacts
• Handling, lifting or positioning patients (especially immobile patients) or heavy loads • Repetitive motions, especially in an awkward position • Extended periods of standing (e.g. during long surgeries or procedures) • Continued forceful exertion	• Strains and sprains to muscles and connective tissues causing pain, inflammation, numbness, or loss of muscle function • Lower back injuries

Potential Root Causes

Policy:	Identification of Risks and Impacts:	Organizational Capacity and Competency:
• Lack of, inadequate or improperly implemented ergonomic safety policies and procedures	• Inadequate risk assessment to identify ergonomic hazards. • Lack of worker consultation in designing work areas and processes • Lack of worker awareness about ergonomic hazards in the facility	• Insufficient worker training on proper methods of performing duties (e.g. proper ways to lift patients or heavy materials) • Failure to assign a responsible party for managing ergonomic hazards • Insufficient number of staff to perform duties

RADIOLOGICAL HAZARDS	
Examples	**Potential Impacts**
• Exposure to radiation from portable or fixed x-ray machines or radiation therapy	• Nausea, vomiting, stomach pains or diarrhea • Radiation sickness • Cancer • Death
Potential Root Causes	

Identification of Risks and Impacts:	**Management Program:**	**Organizational Capacity and Competency:**
• Lack of awareness of radiation sources and associated risks in the facility	• Use of expired radiation licenses or improperly maintained radiation sources • Deficient procedures regarding allowable exposure limits and worker exposure periods • Inadequate PPE	• Insufficient worker training on proper radiation controls • Failure to assign a responsible party for managing radiological hazards

Emergencies Caused by External Events

In addition to emergencies that may result from hazards in your health care facility, all workplaces are vulnerable to other types of accidents and emergencies resulting from external events. The following list includes common types of manmade and natural disasters, all of which can result in significant worker or patient injury or death, as well as cause disruptions to your operations, destruction of property, and severe financial losses.

During your risk assessment, you should identify the emergencies that are most likely to occur in your area and create a comprehensive emergency response and preparedness plan so you can respond properly and minimize damage to your facility, workers and patients in case of unplanned external events.

Possible manmade or natural disasters include:

- Storms, including tornados, typhoons and hurricanes (many can result in flooding)
- Flooding
- Earthquakes and associated tsunamis
- Volcanic eruptions
- Local and regional fires
- Explosions including accidental, military or terrorism
- Civil unrest
- Violent assault against health care workers
- Chemical spill or release of hazardous substances through ruptured containers due to transport accidents, earthquakes and other natural disasters

Stakeholder Engagement

5

Stakeholder engagement is part of regular activities. Awareness and engagement at senior levels. Fluent and inclusive communication and consultation process with stakeholders.

4

Multiple and ongoing public consultation and participation in a culturally appropriate manner. Stakeholder feedback is actively considered. Reporting to communities and effective grievance mechanism is evidenced by formal records.

3

Stakeholders have been identified and engaged in several events with effective dialogue. Some procedures and assigned responsibility for engaging with stakeholders.

2

Some public events, limited ongoing engagement process. Sporadic and selective responses when approached by stakeholders.

1

Limited channels in place. A few meetings and discussions, but not an ongoing process yet.

0

Little or no transparency with stakeholders.

Your facility may have an impact on the lives of many people and organizations. All of these people and organizations are your stakeholders - they have a stake in your environmental and social performance.

Look at the diagram below and think about how your organization interacts with each group. Your relationship with each group is different, and you need to adapt the way you engage with each of them to mitigate risks to your business.

Systematically engaging with affected communities in the identification and management of the impacts that negatively affect them contributes to building trust, credibility and local support. Engaging with them also provides the opportunity to highlight the positive aspects of your presence. This lowers the risk of negative sentiments that could lead to costly litigation or disruption of operations.
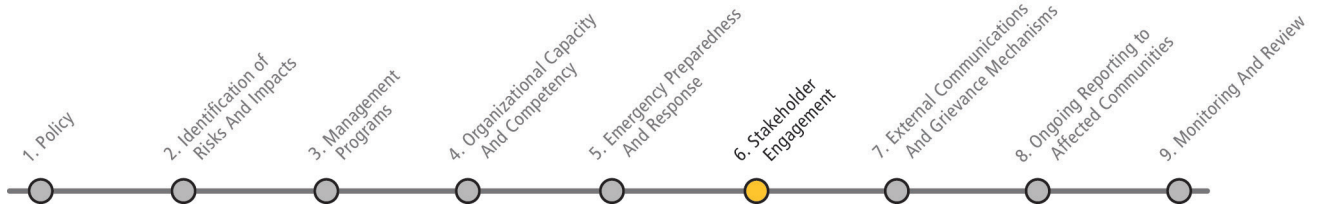
Other stakeholders such as activists and NGOs may not be directly affected by your operations but may have an interest in what you do. Keeping these groups informed and maintaining an open communication channel may lower the risk of negative campaigns that could affect your organization's reputation.

MAPPING YOUR STAKEHOLDERS

The first step in building a relationship with your stakeholders is to identify them. To start, look back at your risk assessment and the areas of potential negative impacts and identify who would be directly or indirectly impacted.

Once you have identified your stakeholders, you should prioritize the different groups based on the nature and severity of the impacts, and the ability of these groups to influence your operations. Engagement should be stronger and more frequent with those groups that are more severely affected, as well as with those that have a greater ability to influence your organization.

Also, as you identify your stakeholders and the issues that may affect or interest them, you can tailor your communication material and methods to effectively engage with each of them.

INTERNAL AND EXTERNAL STAKEHOLDERS

Workers are an important internal stakeholder group. They also need to be involved in the identification of risks that affect them and be consulted when developing action plans and procedures. However, the methods of engagement with them will differ from those used for external stakeholders.

Use the Toolkit item **Stakeholder Map** and **Impact Zoning Tool for Affected Communities** to get started.

For effective consultation with affected communities :

- Start early;

- Disclose meaningful and accurate information;

- Use culturally appropriate means to reach them;

- Provide opportunities for two-way dialogue ;

- Document to keep track of issues raised; and

- Report back on how their input has been used and considered

DEVELOPING A STAKEHOLDER ENGAGEMENT PLAN

After mapping your stakeholders, the next step is to develop a plan for how to engage with the groups that you have identified. Your stakeholder engagement plan can be simple. But it is important to be proactive and to address key environmental and social concerns.

At a minimum, even if your facility does not have adverse impacts on communities or other stakeholders, you should always implement a procedure to receive communications from the public and accordingly adjust your management program (see Element 7, External Communications and Grievance Mechanisms).

If it is determined that there are affected communities, you need to implement a Grievance Mechanism (see Element 7, External Communications and Grievance Mechanisms) and actively engage them in consultation, regularly disclosing clear and meaningful information on both your impacts and potential benefits, and providing communities with opportunities to express their concerns and suggestions.

In the case of potentially significant adverse impacts to individuals and communities, you should engage them in a process of Informed Consultation and Participation (ICP). Compared to a consultation process, an ICP should ensure a more in-depth exchange of information and a higher level of participation from affected stakeholders in decision-making, so that their proposed mitigation measures are incorporated into the organization's action plan.

Finally, you should periodically report to affected stakeholders on the actions your organization is putting in place to address the issues identified through the engagement process (see Element 8, Ongoing Reporting to Affected Communities).

Regular communication with the various stakeholder groups is an excellent way for you to understand how your operations affect them and to get early warnings of potential problems. In all your efforts to reach out to stakeholders, ensure that you do so early on – relationship-building takes time. Don't wait until a crisis arises to act, as it will be more difficult without those relationships in place to manage the problem.

Use the Toolkit item **Stakeholder Engagement Plan Worksheet** to record how you will engage with the important stakeholder groups.

Effective Stakeholder Engagement

- Be strategic and prioritize which stakeholders to approach – you may not have the resources to engage them all at once.

- Update your stakeholder map regularly and in the case of significant events (e.g., changes to your operations, government elections, natural disasters, etc.).

- Be aware of what issues are important to each group.

- If you are dealing with a representative for the group, make sure that he/she legitimately represents the interests of the affected groups and communities.

- Engage with stakeholders in their own communities and places where they feel comfortable.

- Reach out to vulnerable and marginalized groups.

- Keep a record of questions, comments and suggestions. Records provide important information that should be used to adapt your Action Plans and improve your ESMS.

- Recognize that your employees are a good link to stakeholders in the "outside world."

- Be prepared to respond to stakeholders, and do not generate expectations that cannot or will not be fulfilled.

DEFINITIONS	
Stakeholder	Any person or organization that has an interest in or is affected by your organization.
Affected Communitites	People or communities who are subject to organization-related adverse impacts on their environment, infrastructure, way of life, personal safety, health or livelihood.

For more information on how to develop and implement a Stakeholder Engagement Plan, refer to the Good Practice Handbook *"Stakeholder Engagement,"* IFC (2007).

External Communications and Grievance Mechanisms

5 Proactive and responsive external communication and grievance mechanism. Stakeholders are consulted on ESMS effectiveness and are part of the regular review process.

4 Effective grievance mechanism is evidenced by formal records. There is routine review of the records and the effectiveness of the program.

3 Grievance mechanism is fully implemented; however, there is not enough evidence of its effectiveness. No tracking of internal or external awareness; limited tracking of cases.

2 Procedures and assigned responsibilities for receiving and handling complaints. Awareness is limited to those directly handling the complaints.

1 Some basic procedures for receiving complaints. Responsibility limited to one person or unit.

0 No mechanism in place.

If your facility has social and environmental impacts in the community, inquiries, concerns and complaints are bound to arise. How you respond to and manage these issues will have significant implications for how your organization is perceived and, possibly, whether or not it succeeds.

EXTERNAL COMMUNICATIONS

Even if affected communities per se are not identified, you should always establish and maintain a publicly available and easily accessible channel for stakeholders to contact you (e.g., phone number, website, email address, etc.).

External stakeholders can provide valuable information, such as suggestions on healthcare improvement, advance warning in critical situations, feedback on interactions with your employees, and/or comments from regulators, NGOs and individuals regarding your facility's environmental and social performance.

The procedure for external communication should include methods to (i) receive, register and validate external communications and requests for information from the public; (ii) screen and assess the importance of the issue raised and determine how to address it; (iii) provide, track, document and publish responses; and (iv) adjust the management program when appropriate.

GRIEVANCE MECHANISMS

The purpose of a grievance mechanism is to establish a way for individuals, groups or communities affected by your facility to contact you if they have an inquiry, a concern or a formal complaint.
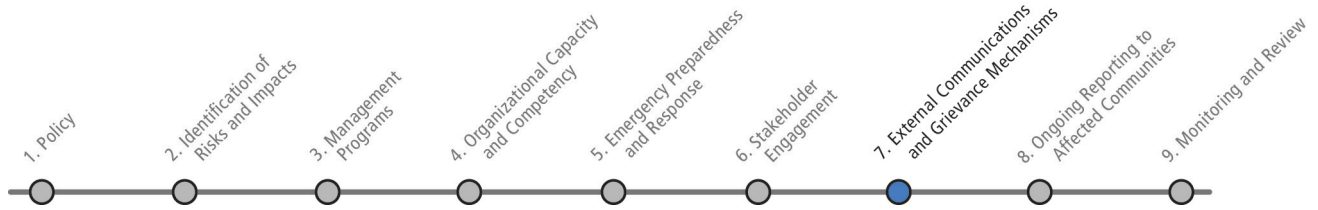
In practice, a grievance mechanism should:

- Establish a way for people to contact you – openly or anonymously – to pose their questions, to express concerns or to file a complaint. Examples are suggestion boxes, a toll-free telephone hotline, an email address, and regular meetings arranged to discuss particular problem areas.

- Assign a person or team in your organization to be responsible for receiving, registering and processing all grievances.

- Establish procedures to register, screen, categorize, investigate and determine resolution and redress options.

- Establish a system to communicate decisions taken and progress on pending actions. It is important that people know when they can expect a response.

Not all complaints can be resolved in the same way. Simpler issues, such as an emergency vehicle running over chickens in the road, might be dealt with by the same team responsible for registering the complaint. More complex problems, such as allegations of widespread groundwater contamination, might require immediate intervention by senior managers and more dedicated resources for investigating, documenting and reporting. For complex and recurring problems, consider reaching out to third-party facilitators that can act as independent mediators.

The more serious the claim is, the more independent the mechanism should be to determine the resolution and options for redress.

The most important thing is to make sure the grievance mechanism is accessible and trusted. Tailor it for the local community so that it is easy for them to raise concerns. This requirement mandates having the right people leading this effort inside your organization. The grievance mechanism must be accessible at no cost and without retribution to the party that originated the complaint and should not impede access to judicial or administrative remedies.

Don't underestimate the value of a well-implemented grievance mechanism. The information you receive can act as an early-warning system before the problem becomes too costly and time-consuming to address.

TIP

Implementing a Grievance Mechanism

- Scale it to fit the level and complexity of social and environmental risks and impacts identified in your organization.

- Design the process to be easily understandable, accessible, trusted and culturally appropriate.

- Publicize the availability of the grievance procedure so people know where to go and whom to approach.

- Commit to a response time and keep to it as this will increase transparency and a sense of "fair process."

- Keep records of each step to create a "paper trail."

> Look at the Toolkit items Checklist for an Effective Grievance Mechanism and Grievances Log to get started.
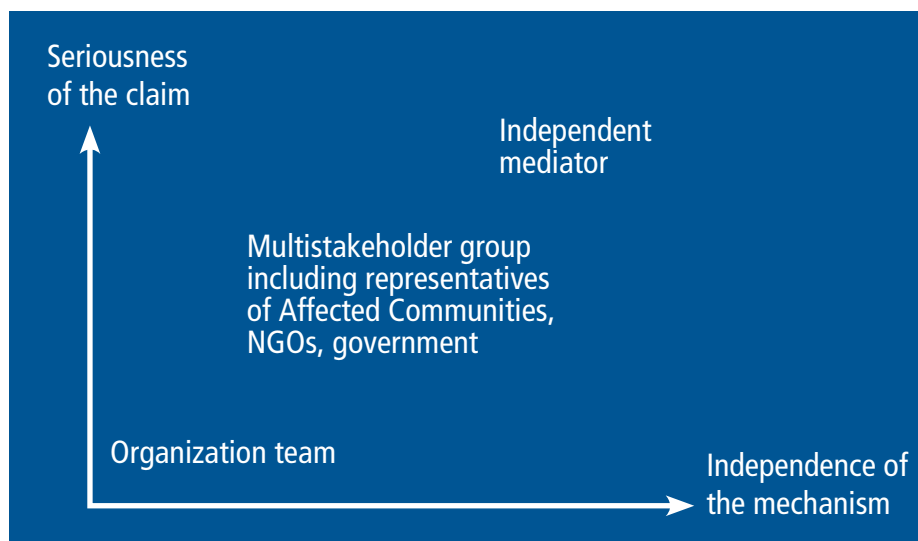
TIP

A Grievance Mechanism is

UNDERSTANDABLE AND TRUSTED when:

- affected communities understand the procedure to handle a complaint;

- people are aware of the expected response time; and

- confidentiality of the person raising the complaint is protected.

CULTURALLY APPROPRIATE AND ACCESSIBLE when:

- claims can be presented in the local language;

- technology required to present a claim is commonly used (e.g., paper, text messaging, internet); and

- illiterate persons can present verbal complaints.

AT NO COST when:

- people don't need to travel long distances to present a claim; and

- the organization covers the costs of third party facilitation.

For more information on how to develop and implement a Grievance Mechanism, refer to the Good Practice Note "*Addressing Grievances from Project-Affected Communities,*" IFC (2009), and the Advisory Note *"A Guide to Designing and Implementing Grievance Mechanisms for Development Projects,"* CAO (2008).

1. Policy

2. Identification of Risks And Impacts

3. Management Programs

4. Organizational Capacity And Competency

5. Emergency Preparedness And Response

6. Stakeholder Engagement

7. External Communications And Grievance Mechanisms

8. Ongoing Reporting to Affected Communities

9. Monitoring And Review
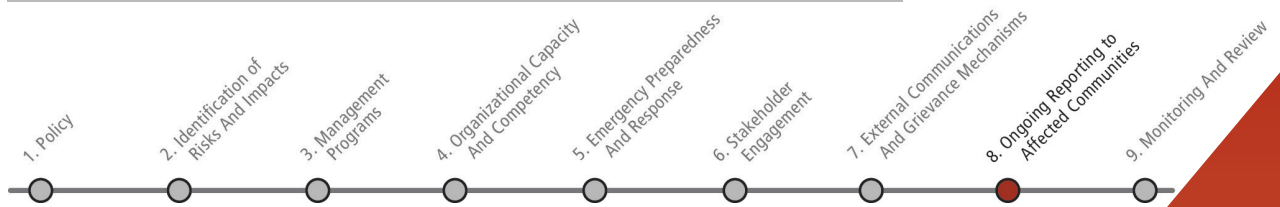
Ongoing Reporting to Affected Communities

Affected communities will want to know what actions your organization has put in place to resolve the issues identified when engaging with them.

Keeping affected communities informed of what you are doing is a critical element for building and maintaining a good relationship. If people know when they will receive an update, it helps to build trust. It can also reduce the amount of time you spend responding to questions.

The frequency of this communication will be proportional to the scale of stakeholders' concerns, but it should be at least annual. If your activities change or new environmental and social risks emerge, you do need to contact stakeholders outside of the regular schedule to discuss these changes.

TIP

Ongoing Communication

- Provide an immediate update if new environmental or social risks emerge.

- Report progress on implementation of your commitments.

- Report monitoring results on issues that interest the community.

- Use the opportunity to communicate the benefits generated by your facility.

- Translate information into local languages and easily understandable formats.

- Try to maintain continuity in who deals with the community.

- Involve your employees as communication links to the community.

- Consider conducting a stakeholder survey to learn how your organization is perceived.

You can also decide to report back to the wider public on your progress in meeting your commitments to avoid, reduce and mitigate any negative environmental or social impacts from your organization's activities. Sustainability reporting initiatives, guidelines, including sector-specific guidelines, and good practices are also rapidly emerging in this area. The most notable is the Global Reporting Initiative (GRI).

Look at the Toolkit item **Reporting to Affected Communities** for examples of formats and venues you can use.

5 — Affected communities' issues and concerns are proactively addressed. There is ongoing communication to avoid risks and impacts before new projects as well as to address existing issues.

4 — Reporting to affected communities is regularly implemented and evidenced in documentation. Key units are involved in the review of the key issues.

3 — When applicable, consultation processes have been implemented. External consultants are involved as required. No ongoing review.

2 — Procedures in place for reporting, usually assigned to E&S staff. Primarily reactive.

1 — Some basic communications with affected communities, mostly limited to meetings.

0 — No reporting.

Monitoring and Review

5 Robust system of continual learning and improvement. Senior management receives periodic reports about E&S performance and progress toward E&S objectives and targets. All key project decisions consider E&S.

4 Monitoring, supervising and auditing activities are integrated and included in management review. Includes consultation with workers, customers and suppliers. E&S objectives and targets are included in job descriptions and performance reviews.

3 Routine review of monitoring and supervision activities, including participation of workers. Corrective actions routinely implemented. An E&S internal audit plan is in place.

2 Key E&S monitoring plans in place, with inspection and supervision activities. Primarily reactive and guided by external experts, customers and investors.

1 Few monitoring plans to satisfy regulatory requirements. No formal review activities. No systems awareness or repeatable processes

**0** No monitoring of E&S performance.

We've talked about the relationship between your ESMS and the Plan-Do-Check-Act cycle of continual improvement. Monitoring and review are critical, because this is how you check and adjust the system.

So far, you've formed or assigned a team to lead the effort. You have developed your ESMS and started to implement your action plans in response to the risks and impacts you identified. You've started to train people. The next step is to monitor the effectiveness of your ESMS and your action plans and make the necessary adjustments.
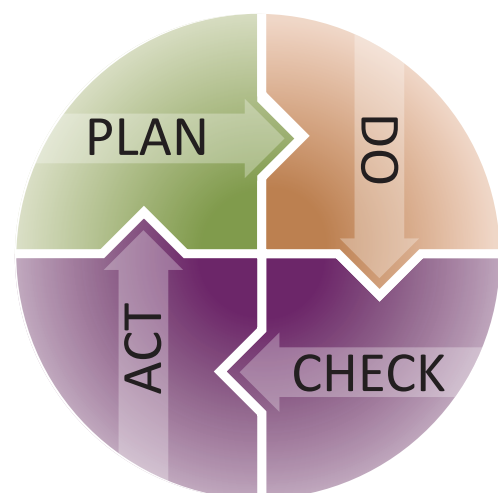
Monitoring is the **CHECK** step of the PDCA cycle

Review is the **ACT** step of the PDCA cycle

PLAN   DO   CHECK   ACT
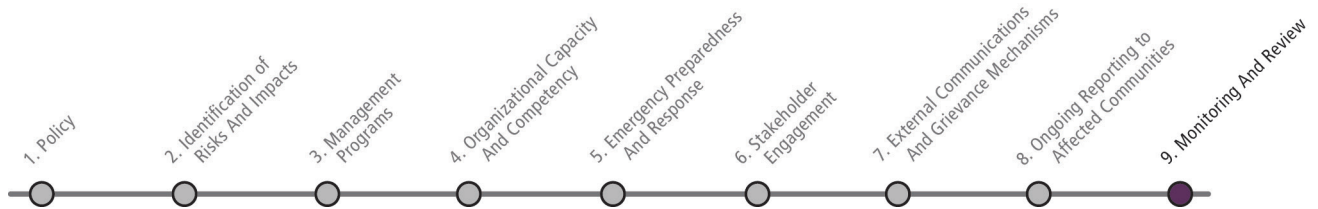
TIP

> **Monitoring measures intent, implementation and effectiveness**
>
> Intent:
>
>   1. Are the nine elements of the ESMS in place?
>
> Implementation:
>
>   2. Are the action plans being carried out?
>
>   3. Are procedures being followed?
>
> Effectiveness:
>
>   4. Are you in compliance with laws and regulations?
>
>   5. Are you making progress toward your overall objectives and targets?
>
>   6. How is the environmental and social performance of the organization in general?

INDICATORS

A key aspect of monitoring is defining relevant indicators. These are quantitative or qualitative measures of progress against set goals. Some indicators might focus on **performance**, evaluated against the criteria defined in your environmental and social policy.

Some examples of key performance indicators could be:

- energy consumption;
- water consumption;
- volume of non-hazardous and hazardous waste disposal;
- liquid effluents discharge;
- emissions to air;
- facility indoor air quality;
- infection rates;
- number of need-stick and sharps injuries;
- absenteeism frequency;
- accidents (injuries, ill-health, property damage), incidents and near misses;
- lost time injury frequency, incidence, and severity rates;
- emergency response incidents;
- average working hours and wages paid;
- wage levels;
- incidences of disciplinary and discrimination complaints; and
- employee demographics matching access to training, jobs, and wages.

Measuring and Improving

Remember, you can't improve what you don't measure.

You can also use this information when reporting to a wider public on your ESMS performance. When selecting your key performance indicators, you may refer to voluntary guidelines such as the Global Reporting Initiative.

Other indicators can look at the **processes or inputs** that you use to try to achieve performance.

For example, in your action plan, you might have included worker training as a necessary step to raise awareness among workers about OHS, so that they can help to identify and address key risks and hazards. In this case, you might evaluate your progress against the action plan by tracking the percentage of workers who have been trained, or the percentage of workers who can correctly describe the risk analysis procedure.

Some examples of process indicators include:

- procedures in place for chemical, fuel and hazardous waste handling, storage, and disposal;
- processes analyzing for water and energy conservation;
- percentage of workers who can explain safe work practices;
- percentage of workers who can explain the emergency response procedures;
- percentage of workers trained on infection control; and
- communications from stakeholders.

It is helpful to have a mix of performance and process indicators, to get a deeper understanding of whether you are measuring the appropriate things and whether you are taking the appropriate actions. For example, a performance indicator such as "zero incidences of forced labour" does not tell the full story: Was this the result of effective procedures and training or was the system inadequate in identifying and recording incidences?

For environmental and OHS performance indicators and benchmarks relevant to your industry, consult the *WBG EHS Guidelines* at www.ifc.org/sustainability

Look at the **Monitoring Plans** in the Toolkit for more examples of common key indicators.

THE BASICS OF MONITORING

Visual observation

physical walk-throughs of your facility and surrounding land. Examples of what you might observe: physical obstructions and blocked exits, fire detection, alarm and fighting equipment, infection control warning signs, storage of hazardous materials, housekeeping, drinking water and sanitation facilities, information displayed on notice boards , worker and supervisor body language and interactions.

Interviews

consultations with workers, managers and external stakeholders. Examples of topics you might discuss: Do workers and managers understand the policies and procedures? How are they impacted? Are there ideas for improvement? Do workers feel comfortable filing complaints? How are external stakeholders impacted by the organization? Are there ideas for improvement? Do external stakeholders feel comfortable filing complaints?

Measuring and testing

checking using equipment that is properly calibrated. Examples of what you might check: emissions to air, effluents, indoor air quality, ambient temperature, light levels.

Document review

looking through documents and records. Examples of what you might review: water and energy bills, waste disposal records, staff injury log, chemical use and discharges records, inspection records, OHS records, complaints logs, wage slips, time cards, policies and procedures, training records.

Look at the Toolkit item **Auditing Guidance** for guidelines on how to conduct an audit.

Monitoring and **auditing** are words that are often used interchangeably, which can be confusing. Auditing is a formal, on-site evaluation against a specific set of criteria. Audits can be conducted internally by your own staff or by outside parties. Monitoring is an umbrella term that includes various methods for evaluating performance. These may include: visual observation, measuring and testing, questionnaires, surveys, interviews with employees and external stakeholders, and document review. It is important to design your monitoring program to obtain qualitative and quantitative information. It is also important that workers and managers are monitoring the workplace on an on going basis.

MEASURING AND IMPROVING YOUR ESMS

While your Action Plan monitoring looks at whether corrective actions are being implemented and are achieving the intended results, your ESMS monitoring is looking at the maturity of your system development and implementation. The Action Plan lists new actions you are taking to address risks. But for the new actions to be sustainable, you also need to improve your ESMS. The two need to be linked.

This Handbook's companion publication ESMS Self-Assessment and Improvement Guide provides you with a practical tool to monitor the maturity of your ESMS. For each of the nine ESMS elements, we provide self-assessment questions that show you the level of your ESMS development and implementation on a scale of 0 to 5 (5 is the highest).   Conducting the ESMS self-assessment is an important first step that enables you to see where you stand now. The results form the basis of your ESMS Improvement Plan. The ESMS self-assessment responses should be based on Visual Observation, Measuring or Testing, Document Review and Interviews.

Let's take another look at the nine elements of the ESMS and maturity ratings.

Purpose of Action Plan and ESMS Improvement Plan

Action Plan: specific actions to correct environmental, labor and community problems and remediate negative impacts

ESMS Improvement Plan: steps targeted to continually improve the management system to support activities in the Action Plan

	Policy	Identification of Risks and Impacts	Management Programs	Organizational Capacity and Competency	Emergency Preparedness and Response	Stakeholder Engagement	External Communications and Grievance Mechanisms	Ongoing Reporting to Affected Communities	Monitoring and Review
5	Mature system implemented internally and with key supply chain partners – continual improvement embedded in operations								
4	Systems well-developed and implemented internally – routine improvement projects								
3	Systems approach adopted, but development and implementation is inconsistent - improvement sporadic								
2	Limited system development with sporadic implementation – primarily reactive								
1	Little systems awareness or repeatable processes								
0	No systems awareness or repeatable processes								

LINKING YOUR ACTION PLAN AND ESMS IMPROVEMENT PLAN

It is important to understand the link between the Action Plan and the ESMS Improvement Plan. The Action Plan lists specific projects and activities. The ESMS Improvement Plan is about making system improvements needed to support the activities and to make the necessary changes in how the organization operates.

Improving environmental and social performance and integrating it into your routine operations takes time. The improvement plan for your ESMS needs to be practical. It needs to be designed with the understanding that people have their core operating responsibilities in your organization. You cannot improve everything at once. The ESMS Team plays the critical role of leading the improvement effort. Prioritizing what to work on first is an important job for the team in coordination with senior management. The ESMS Self-Assessment and Improvement Guide will help you to get started.

CONDUCTING AN EFFECTIVE MANAGEMENT REVIEW

The purpose of the management review is to routinely involve senior management in evaluating the development and implementation of the ESMS. The management review is led by the ESMS Team.   In the beginning, we recommend conducting a management review every three to six months. Once the ESMS is well-established, once a year is usually fine.   It is important to keep a written record (called minutes) during the meeting of the key topics discussed and the decisions made. The minutes should be kept in a central log.

For the ESMS Team, the management review is an important opportunity to keep senior management involved. Remember, the sustainability of the program requires ongoing commitment from senior management.

Typical Agenda for a Management Review:

- Review progress on Action Plan
- Review progress on ESMS Improvement Plan
- Review compliance with environmental and labor laws and regulations
- Review progress on environmental and social performance
- Discuss possible adjustments in risk assessment
- Prioritize activities for next three, six and 12 months
- Review and approve needed resources by senior management

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