NATIONAL POLICY

INJECTION SAFETY AND MEDICAL WASTE MANAGEMENT

FEBRUARY 2007
FOREWORD

The Ministry of Health recognizes the importance of safeguarding patients, health workers and the community at large from risks associated with unnecessary and unsafe injections as well as improper disposal of medical waste. Studies worldwide indicate that needle stick injuries are common among health care workers as reported by WHO. In addition, a 3-month study by University of Nairobi (UoN), it found out that of 214 nurses, 61% had needle stick pricks.

The overall objective of the Policy is to ensure safe injection practices and proper management of medical waste, in order to safeguard the patient, health care provider, community and the environment. This will be achieved through; training, behaviour change communication, provision of adequate supplies for injection equipment and proper waste management practices. All stakeholders will be expected to provide the necessary support in ensuring the achievement of the objectives for injection safety and waste management.

The National Injection Safety (IS) and Related Medical Waste Management (RMWM) policy sets out strategies for ensuring that health workers, patients, communities and the environment are protected from risks associated with unnecessary and unsafe injections.

I wish to thank our development partners for their continued support, and call upon all the concerned stakeholders to implement this policy. The successful implementation of the objectives herein will contribute significantly to the improved health of all Kenyans.

Dr. James Nyikal,
Director of Medical Services
ACKNOWLEDGEMENT

The Ministry of Health acknowledges the support received from individuals and institutions whose contribution made this work possible. This document was developed through the efforts of the Kenya National Injection Safety Committee of the Ministry of Health with various stakeholders.

We acknowledge support of the Director of Medical Services, the Head of Preventive and Promotive Health Services, NASCOP Injection Safety and Infection Control Program, Division of Nursing and Division of Environmental Health.

Our sincere gratitude also goes to our partners; JSI-MMIS who played a big role, the CDC team, and all the others who contributed towards the success of this policy document.

Many other people have contributed directly or indirectly to the entire process and while we may not be able to acknowledge each individual, we would like all of them to know that we appreciate their efforts in this exercise.
### ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>BCC</td>
<td>Behaviour Change Communication</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control and prevention</td>
</tr>
<tr>
<td>DMS</td>
<td>Director of Medical Services</td>
</tr>
<tr>
<td>GoK</td>
<td>Government of Kenya</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immune Deficiency Virus</td>
</tr>
<tr>
<td>HCW</td>
<td>Health Care Waste</td>
</tr>
<tr>
<td>HCWM</td>
<td>Health Care Waste Management</td>
</tr>
<tr>
<td>IS</td>
<td>Injection Safety</td>
</tr>
<tr>
<td>JICA</td>
<td>Japan International Cooperation Agency</td>
</tr>
<tr>
<td>JSI-MMIS</td>
<td>John Snow Inc. Making Medical Injections Safer</td>
</tr>
<tr>
<td>KEMSA</td>
<td>Kenya Medical Supply Agency</td>
</tr>
<tr>
<td>KQM</td>
<td>Kenya Quality Management</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MOH</td>
<td>Medical Officer of Health</td>
</tr>
<tr>
<td>NGO</td>
<td>Non Governmental Organization</td>
</tr>
<tr>
<td>NHSSP</td>
<td>National Health Sector Strategic Plan</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>UON</td>
<td>University of Nairobi</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

Foreword ........................................................................................................... 2  
Acknowledgement ............................................................................................. 3  
Acronyms ......................................................................................................... 4  
  1. Background ................................................................................................. 6  
  2. Situation Analysis ....................................................................................... 7  
      2.1 Clinical Practice .................................................................................... 7  
      2.2 Waste Management ............................................................................. 7  
      2.3 Logistics .............................................................................................. 8  
      2.4 Behaviour Chance Communication (BCC) ......................................... 8  
  3. Mission ........................................................................................................ 8  
  4. Overall Goal ............................................................................................... 8  
  5. Policy Objectives ....................................................................................... 9  
  6. Guiding Principles .................................................................................... 9  
  7. Policy Strategy ........................................................................................... 10  
      7.1 Capacity Building ................................................................................ 10  
      7.2 Appropriate Financial Allocation and Mobilization ......................... 10  
      7.3 Strengthening of the Logistics Management System ....................... 10  
      7.4 Advocacy and Behaviour Change Communication ......................... 10  
      7.5 Strengthening of Information Management System ....................... 11  
      7.6 Monitoring and evaluation ................................................................. 11  
  8 Specific Guidelines ...................................................................................... 11  
      8.1 Clinical Practice .................................................................................. 11  
      8.2 Waste Management ........................................................................... 12  
      8.3 Logistics ............................................................................................ 12  
      8.4 Behaviour Chance Communication (BCC) ....................................... 13  
  9 Institutional framework .............................................................................. 13  
      9.1 Organization and Management .......................................................... 13  
      9.2 Inter-agency Coordinating Committee of the MOH ......................... 14  
      9.3 Quality Assurance ............................................................................ 14  
  10 Monitoring and Evaluation ....................................................................... 14  
  11 Research .................................................................................................... 15  
      Organization Structure ............................................................................. 16
1. BACKGROUND

Many people in developing countries stand the risk of acquiring blood borne diseases through unsafe injections and improper handling of injection waste. When providing health services, it is important to prevent the transmission of diseases at all times. Health care facilities are ideal settings for transmission of diseases due to invasive procedures which have the potential of introducing micro-organisms into the body. Health care providers and the community at large are exposed to improperly disposed potentially infectious hospital wastes.

With appropriate Infection Prevention Control (IPC) practices, health providers can protect themselves and the community from hospital acquired HIV and Hepatitis B. Injection Safety and Related Medical Waste Management are components of the wider infection prevention control strategy which is applied to protect health care providers and the clients from such adverse effects.

The aim of this document is to guide health professionals and stakeholders to provide safe injections and proper waste management in order to protect health care providers and the community from medical sharps injuries.

A lot of waste is generated from injection use, laboratory and surgical procedures as well as other medical activities. Recent surveys have established that health care providers and consumers are confronted with significant environmental hazards due to improper disposal, delayed disposal and destruction of injection and other medical waste. According to WHO, a safe injection does not harm the recipient, does not expose the health care worker to any avoidable risk and does not result in waste that is dangerous to the community.

In view of these concerns, several studies and assessments have been conducted by the Ministry of Health (MOH) and other organizations on injection and health care waste management. The baseline data from the assessment done by Kenya Expanded Program on Immunization (KEPI) within the MOH was used to guide the Injection Safety (IS) policy.
2 SITUATIONAL ANALYSIS
A National cross-sectional survey of Injection Safety practices in health facilities was conducted by the Ministry of Health through Expanded Program on Immunization in November 2003. The survey revealed that over 70% of the respondents received an average of 1.5 injections per year.

The study indicated that the most prominent factors contributing to unsafe injection practices include;

- Over-prescription of injections
- Limited availability of guidelines for health workers at all healthcare levels
- Inadequate supply of injection materials leading to reuse of injection equipment
- Inadequate facilities for collection and disposal of injection related waste.

2.1 Clinical Practice:
Health care workers are at high risk of injuries from unsafe injection practices. Needle stick injuries occur commonly during recapping of needles. Other unsafe practices encountered and observed in injection practice include;

- Giving injections at wrong site causing abscesses and nerve damage,
- Contamination of drug through the practice of leaving needles in the vial for repeated use,
- Administering large boluses of injections - more than 2cc,
- Mixing of more than one drugs in one syringe,
- Preparation of injectable drugs away from patient rather than at patient’s beside leading to mix up,
- Preparing swabs in advance, predisposing them to possible contamination and infection.

2.2 Waste Management:
The practice of indiscriminate dumping of Medical Waste is prevalent in a majority of health facilities. Incineration facilities are limited and where available, they are either broken down or improperly used.
The limiting factors in proper management of waste include; inadequate training, supplies, and lack of standards and guidelines.

2.3 Logistics:
Majority of the health facilities reported having experienced a shortage of disposable injection supplies in the 12 months prior to the survey, particularly in the curative services. Analysis of the current status of injection supply logistics reveals that there are no data on the number of injections given making it difficult to carry out forecasting and procurement.

2.4 Behavior change communication (BCC):
Adverse events associated with injections are caused by unsafe injection practices. These are a consequence of attitudes of health providers, patients and the community on the preference of injections. Some patients demand for injections because they believe that injectables are more efficacious than orals. On the other hand, some prescribers have the perception that patients prefer injections and they also find injections easier to administer.

Of particular concern is the reuse of injection equipment and improper management of injection waste which all requires a multidisciplinary strategy. The development and implementation of behavioural change interventions will result in the promotion of safe and appropriate use of injections.

3 MISSION

To ensure the safety of health workers, patients, and the community and maintain a safe environment through the promotion of safe injection practices and proper management of related medical waste.

4 OVERALL GOAL

To promote safe injection practices and proper management of medical waste both in health care settings and the community.
5. POLICY OBJECTIVES

- To promote the rational use of injections, and reduce unnecessary demand and over prescription.
- To strengthen procurement procedures for safe injection supplies.
- To facilitate behavior change among health workers and communities to appropriately reduce risks, increase safety and minimize need for injections.
- To improve knowledge, attitude and skills on injection practices and waste management by health workers and the community.
- To advocate for support and implementation of safe injection practice and proper management of medical waste
- To strengthen monitoring and evaluation system of injection safety and waste management practices

6. GUIDING PRINCIPLES

The guiding principles for the implementation of this policy will be:-

- Access to information and training by health workers, communities and all stakeholders.
- Establishment of organizational structures at all levels for the implementation of injection safety and related medical waste management.
- Environmental protection through appropriate waste disposal methods.
- Sustained supplies of injection and waste management equipment through an effective logistic system.
- Minimization of risks to patients, health workers, communities and the environment through application of safer devices and disposal methods.
- Observation of professional ethics in injection and waste management practices.
- Involvement of all relevant stakeholders.
7. POLICY STRATEGY

The strategy for achieving the objectives of injection safety include the following;

- Capacity building
- Financial allocation and mobilization
- Strengthening of the logistics management system
- Advocacy and behaviour change communication
- Strengthening information system
- Monitoring and Evaluation
- Private public sector collaboration

7.1 Capacity Building:
In line with the National Health Sector Strategic Plan (NHSSP) of 2005-2010, this policy will advocate for the strengthening of the necessary human resource capacity through training and sensitization on injection safety and safe waste management.

7.2 Appropriate Financial Allocation and Mobilization:
Appropriate financial mobilization and allocation by all health care institutions should ensure that all the components of the injection safety and medical waste management are effectively implemented.

The development partners, NGOs, Faith Based Organizations (FBO) and the community are potential sources of financial and technical assistance.

7.3 Strengthening of the Logistics Management System:
The logistics management system shall be strengthened to ensure sustained supplies and equipment for injection safety and waste management.

7.4 Advocacy and Behaviour Change Communication:
Advocacy should be done to mobilize resources and enhance partnerships in order to build support for injection safety. Achieving behavior change is key to attaining adherence to safe injection and waste management practices. Communication strategies and materials will be identified at every level to reduce unnecessary injections and promote safe disposal of medical waste at health care facilities and within the community.
7.5 Strengthening of Information Management System:
An effective information system is fundamental for safe injection and waste management practices. It should be integrated into the existing health information and management system.

7.6 Monitoring and Evaluation:
Supportive supervision, monitoring and evaluation are key components of the implementation of injection safety and waste management activities at all levels.

8 SPECIFIC GUIDES

The essential components of the Injection Safety and Medical Waste Policy include:
Clinical practice, Waste management, Logistics and Behaviour Change Communication (BCC).

8.1 Clinical practice:
The injection safety Policy objectives aim to promote rational use of injections, eliminate re-use of disposable needles and syringes and reduce the incidence of accidental needle stick injuries among health workers.

In order to achieve these objectives, the policy strives to:
- Provide guidelines and standards of practice for health workers in both public and private sectors on safe administration and handling of injections in clinical settings and the appropriate management of medical waste.
- Provide adequate resources to increase access to quality services and improve the overall safety standards.
- Support regular review of essential drug lists and treatment guidelines, to increase the options for effective alternative oral drug administration.
- Promote use of single dose and marked vials.
- Provide regular supportive supervision and continuing education to health workers to ensure appropriate clinical practice.
- Promote utilization of re-use prevention injection devices where appropriate.
8.2 Waste Management:
Policy objectives in the area of medical waste management include:-
  • Establishment of systems and infrastructure for waste management.
  • Provision of waste management equipment, materials and supplies.
  • Development and dissemination of standards and guidelines on waste management.
  • Promotion of continuing professional development for health workers on waste management.
  • Training of waste handlers on proper waste management.
  • Promotion of segregation, storage, collection, pre-treatment, transportation and proper disposal of waste.
  • Provision of adequate resources to increase efficiency in waste management.

This will include construction/installation of medical waste disposal and destruction facilities.
  • Identification and adoption of appropriate technological options and equipment for HCWM at different levels of healthcare delivery.
  • Promotion of treatment to render harmless recyclable injection waste.
  • Effective enforcement of the various laws and acts on medical waste disposal.
  • Approved waste management systems and disposal sites shall be a requirement for licensing of health facilities.

8.3 Logistics:
This Policy promotes an effective logistics system with proper planning, commodity forecasting, procurement, storage and distribution. This will ensure optimum and sustained supplies for injection safety and waste management.

This policy will strive to:
  • Improve procurement procedures to ensure the availability of injection and waste management supplies in sufficient quantities at the right time and in the right place.
• Promote ‘bundling’ of injectable drugs with syringes, needles, and safety boxes.
• Promote the selection and use of appropriate, adequate and safe products including ‘re-use prevention’ injection devices.
• Maintenance of a secure, cost-effective logistics system for adequate supply of injection and waste management commodities
• Monitoring of quality of the injection safety and waste management supplies.

8.4 Behaviour Change Communication (BCC)
Behaviour change is core to attaining adherence to injection safety and appropriate waste management. BCC is a cross cutting intervention that will target providers/prescribers, waste management personnel, patients/clients and the community.

The policy objectives of BCC are to:-
• Support behaviours and attitudes that foster safe injection and waste management practices.
• Advocate for the elimination of unnecessary injections.
• Promote safe and appropriate management of waste.

Behaviour change will be accomplished through the following strategies:
- Dissemination of the standards and guidelines.
- Review the essential drugs list to include more non-injectable medications where appropriate.
- Design IEC messages focusing on safe injection and waste management practices.
- Develop public private partnerships for mainstreaming of injection safety and waste management activities.

9. INSTITUTIONAL FRAMEWORK:

9.1 Organization and management:

Primary Responsibilities
This injection safety and waste management policy will be implemented
within the National Health Policy Framework in accordance with the second National Health Sector Strategic Plan (NHSSP II) 2005-2010. The Department of Preventive and Promotive Health Services shall be the central coordination point and shall be the chair of the Kenya National Infection Prevention Control and Injection safety Committee. The MOH will give guidance to and monitor the performance of all stakeholders in health care provision.

At all levels of health provisions, the Divisions of Nursing and Division of Environmental Health shall be responsible for overseeing implementation of this policy. NASCOP will coordinate and facilitate injection safety and medical waste management activities.

Infection Control units will be established or reactivated to promote implementation of injection safety and waste management in all the public and private sector health facilities.

9.2 Inter-agency Coordinating Committee of the MOH:
The National Infection Prevention Control and Injection safety Committee shall be a member of the HIV/AIDS Inter-agency coordinating committee.

9.3 Quality Assurance:
The Department of Standards and Regulatory Services shall ensure that injection commodities and the waste management equipment comply with the National Regulations and Standards. This will be done through collaboration with the Kenya Bureau of Standards and National Quality Control Laboratory.

This policy will be in conformance with the advisory and regulatory directives of National Environmental Management Authority (NEMA).

10. MONITORING AND EVALUATION

A monitoring and evaluation (M&E) system forms an integral part of this policy to ensure that planned activities are maintained on course and supported by a functional information system.
The system will monitor and evaluate performance in injection safety and waste management in regard to:-

- Quality of services delivered,
- Sustained supplies,
- Decreased demand for injections.

Methods for monitoring and evaluation will include;

- Inventory of resources
- Regular audit of injection safety and waste management practices
- Periodic supportive supervision
- Surveys

Tools: For Monitoring and Evaluation

- Questionnaires
- Checklists
- Reports

11. RESEARCH

Operational research will be carried out to guide the planning and implementation of injection safety and waste management activities.
ORGANIZATIONAL STRUCTURE FOR INJECTION SAFETY AND RELATED MEDICAL WASTE

DIRECTOR OF MEDICAL SERVICES

DDMS
Preventive And Promotive Services

NASCOP
Injection Safety & Medical Waste Management Program

Director of Nursing Services

Director of Environmental Health Services

Provincial Medical Officer

District Medical Officer

In-charge of Health Centre

In-charge of Dispensary

Community
NATIONAL POLICY
ON INJECTION SAFETY AND MEDICAL WASTE MANAGEMENT