3

CHAPTER THREE

Assessment, Monitoring and Evaluation

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1 Introduction

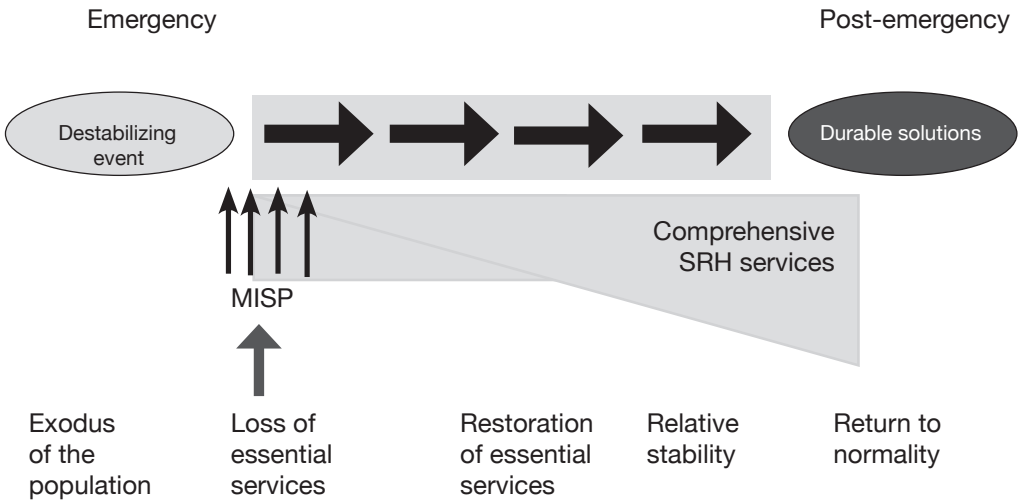
Assessment, monitoring and evaluation are used at different stages during a humanitarian response and are closely linked to public-health decision-making and the implementation of RH programme activities. The results of assessment, monitoring and evaluation inform planning for comprehensive RH programmes because they help to:

- understand the needs of populations of concern
- ensure effective and efficient use of resources
- determine the success or failure of a programme
- provide accountability and transparency to donors and beneficiaries.

RH officers and programme managers often find decisions regarding the transition from implementing MISP activities (see Chapter 2) to initiating comprehensive RH service components challenging. Timely dissemination of accurate assessment, monitoring and evaluation results will enable them to make evidence-based decisions about the steps in the transition to comprehensive RH programme implementation and service delivery. Appropriate use of the results will also ensure that activities are carried out in a sustainable manner, appropriate for the context and adapted to the needs of the population.

Assessment, Monitoring and Evaluation

Figure 3: Continuum of an emergency



Note: *Crises seldom take a linear, clear-cut path from emergency, stability, recovery to development. Often, they are complex, with settings experiencing varying degrees of improvement or deterioration that can last decades. The provision of RH services must therefore take into account the non-linear trajectory of a crisis, and the gaps in services due to insecurity, competing priorities or dwindling funds in protracted settings. The IAFM is applicable for all settings, wherever an agency finds itself on the emergency continuum.*

2 Objectives

The objectives of this chapter are to:

- describe how to assess, monitor and evaluate RH programmes;
- identify appropriate assessment, monitoring and evaluation methods, tools and indicators;
- provide guidance on planning the transition from the Minimum Initial Service Package (MISP) to comprehensive RH programmes.

3 Assessment, monitoring and evaluation

The fifth objective of the MISP requires that planning for comprehensive RH programmes is started from the onset of the humanitarian response. As soon as MISP service delivery targets have been reached and can be sustained (see Chapter 2: MISP), appropriate comprehensive RH service components can be implemented.

RH officers and programme managers must work within health sector/cluster mechanisms to ensure that this design process is in tune with other health planning and resource mobilization activities and that comprehensive RH services are integrated into

primary health care programme development.

When planning a comprehensive RH programme, is important both to understand the needs of the affected population and to take into consideration available resources and identified priorities within the existing health system. The health systems approach defines a number of "building blocks" that make up health systems and offers a useful programming framework within which RH components can be planned, assessed, monitored and evaluated (see Box 14).

The key terms used in this chapter are as follows:

Assessment is a process for determining and addressing needs, or "gaps" between current conditions and desired conditions.

Monitoring is the ongoing, systematic collection and analysis of data as a project progresses. It is aimed at measuring progress towards the achievement of programme objectives.

Evaluation is a process for determining whether programme has met expected objectives and/or the extent to which changes in outcomes can be attributed to the programme.

These three processes are linked along a con-

Box 14: Health Systems Approach*

The six building blocks of a health system are as follows:

- Good **reproductive health services** are those which deliver effective, safe, quality reproductive health interventions to those that need them, when and where needed, with minimum waste of resources.
- A well-performing **reproductive health workforce** is one that works in ways that are responsive, fair and efficient to achieve the best health outcomes possible, given available resources and circumstances (i.e. there are sufficient RH staff, fairly distributed; they are competent, responsive and productive).
- A well-functioning **health information system** is one that ensures the production, analysis, dissemination and use of reliable and timely information on reproductive health determinants, health system performance and RH health status.
- A well-functioning health system ensures equitable access to essential **reproductive health drugs, vaccines and technologies** of assured quality safety, efficacy, availability and cost-effectiveness, and their scientifically sound and cost-effective use.
- A good **health financing system** raises adequate funds for reproductive health, in ways that ensure people can use needed services, and are protected from financial catastrophe or impoverishment associated with having to pay for them. It provides incentives for providers and users to be efficient.
- **Leadership and governance** involves ensuring strategic reproductive health policy frameworks exist and are combined with effective oversight, coalition building, regulation, attention to system design and accountability.

The building blocks provide a useful planning model for the transition between MISP and more comprehensive RH programmes. However, RH officers and programme managers must recognize the interdependence of each block of the health system approach and ensure comprehensive RH services are implemented in an integrated manner.

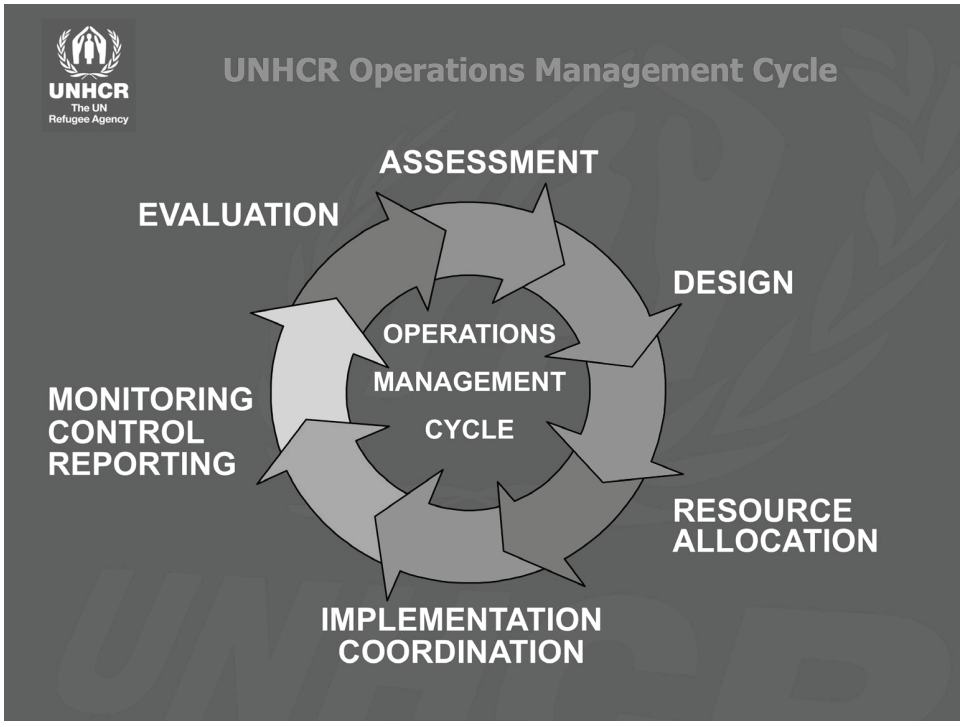
* *From:* Everybody's business: strengthening health systems to improve health outcomes: WHO's framework for action. *WHO Geneva, 2007.*

tinuum of service provision called the project cycle. The project cycle is a tool which helps RH officers and programme managers understand how tasks and management functions should be performed during the course of RH programme implementation (see Box 15).

Box 15: Project Cycle

The **project cycle** defines how assessment, monitoring and evaluation are linked along a continuum of service delivery and programme management. It helps RH officers and programme managers to understand how each can be used to inform decision-making throughout the cycle of programme design, planning and implementation (for an example, see the diagram below).

The ability to carry out successful and timely reproductive health projects in the challenging environment of a humanitarian response is crucial to ensure RH needs of the affected population are met. The most successful RH programmes are those which are designed based on an appropriate **assessment** of needs within the target population. Subsequent programme activities should then be **monitored** using carefully selected indicators to track progress towards clearly stated objectives (See section 3.2 Monitoring for more information on selecting and using indicators). Throughout implementation of the programme, activities should be adequately **evaluated** to reflect on what is working well and what is not, and to feed back the results into a continual cycle of programme review and improvement.



There are a number of tools available to help guide this cycle of planning, assessment, monitoring and evaluation of programmes. One of most widely recognized is the **Logical Framework Approach (**LFA) or “logframe”. (For more information see Further Reading.)

3.1 Assessment

The purpose of an assessment is to rapidly gather information and identify the RH needs of the population and the capacity of the existing health system to respond to those needs.

3.1.1 When to do an assessment?

At the onset of the humanitarian response, an initial rapid assessment is carried out by the humanitarian partners. Within the health sector/cluster coordination system, RH officers must ensure that they obtain information on:

- the number and location of people needing access to minimum RH services;
- the number and location of health-care staff providing, or capable of providing, the service components of the MISP;
- RH medical supply logistic opportunities;
- MISP funding possibilities.

Strategies and plans are adapted accordingly, based on this information. The causes of the most important RH-related morbidity and mortality are already addressed by the MISP and do not need to be assessed at the onset of the humanitarian response (see Chapter 2). When MISP objectives 2, 3 and 4 are in place, a more in-depth assessment is conducted as part of objective 5, planning for the implementation of comprehensive RH services. Throughout the life of a program, periodic assessments can be used to evaluate its progress towards achieving objectives.

3.1.2 What tools are available for assessments?

Four important methods of collecting data in assessments include:

a. Reviews of existing information
b. Key informant interviews and focus group discussions
c. Health-facility assessments
d. Rapid surveys

a. Reviews of existing information

As part of the assessment to plan the introduction of comprehensive RH service components, a thorough review of secondary data sources should be conducted to compile existing RH information on the affected population. Such data will be available from Ministries of Health, UN agencies and NGOs. Examples include:

- Demographic and Health Survey (DHS) or other available survey data;
- Availability of RH services, their geographic distribution and functionality;
- Routine surveillance or health facility data such as those reported to district or national health information systems;
- National strategic plans and/or UN Development Assistance Framework (UNDAF) assessments.

b. Key informant interviews

The purpose of key informant interviews is to collect information from a wide range of people — including community leaders, professionals or residents — who have firsthand knowledge about the affected population. The information collected during an assessment should include key informants' views of pre-existing conditions and practices, the current situation, changes in practices since the onset of the emergency, adequacy of current RH services and priority RH needs of the population. Key informant interviews can either be structured (consisting of a set of questions asked in a specific order) or unstructured (consisting mostly of open-ended questions which can be changed or adapted during the course of an interview).

c. Focus group discussions

The purpose of focus group discussions is to obtain information about a group's beliefs and attitudes on a particular health issue or problem. Focus group discussions differ from key informant interviews as they allow for interaction among all the members of the group. If the discussion is among a sub-group in the population, such as women of reproductive age or

adolescent men, then the results can provide useful information which is representative of that specific group.

d. Health facility assessments
A health facility assessment is an inventory of the places where health care may be provided and the services provided at these sites. A structured checklist of topics can help to provide a description of the health facility, including inventory of RH services provided; staffing and coverage; and an inventory of RH equipment and supplies. This can also include reviews of routine statistics on RH services to determine if standard protocols are followed in order to assure quality of care.

e. Rapid surveys
Rapid surveys can be useful for gathering population-based information quickly during an assessment. Such surveys should be short and contain questions only pertaining to the information needed to identify basic RH needs (see Box 16). Surveys differ from focus group discussions as they do not permit participants to give detailed opinions on a topic.

For examples of the tools described, please see Further Reading.

3.1.3 Who is responsible for conducting assessments?

An assessment team may consist of one to three people with clinical, research, management and public health skills. The number of teams required will depend upon the size of the area to be covered, the prevailing access and security situation and the assessment methods that will be used. When selecting a team, gender, age, ethnicity and social status of its members should be considered. For example, in some cultures it may be inappropriate for a man to ask a married woman questions about her reproductive history. If appropriate, it is also good practice to include members of the affected population in the assessment teams.

The ideal team members:

- have technical skills, training and experience;
- have good communication skills in the local languages and are familiar with the population being assessed;
- are comfortable with discussing reproductive health topics, and are open to learning about reproductive health;
- have good analytical skills;
- are able to make sound decisions based on sparse data.

Box 16: Use of RH Surveys

Surveys can provide useful, population-based data that RH officers and service providers can use to improve and more effectively target RH care services. There are many factors to be taken into consideration when designing a survey. Decisions must be made with regard to sample size, acceptable error levels and sources of bias, based on the availability of resources (time, money, personnel). Surveys that are conducted during initial needs assessments, for example, often need to be carried out rapidly using small, convenient sampling methods. Once the situation stabilises, more detailed survey questionnaires and more representative sampling methods can be used.

The decision on which survey methodology to use is coordinated with the health sector/cluster to ensure it is appropriate and will produce results that are comparable with other surveys that are conducted as part of the health response.

3.1.4 What data is needed in an assessment?

Chapters 4 to 10 provide recommendations on what data should be collected in assessments for each component of an RH programme (see table below). The health system building blocks provide a useful structure to classify RH assessment questions (see Box 14: Health Systems Approach, p. 57).

For more detailed information on assessment data, see:

Chapter 4: Adolescent Reproductive Health	**p. 87**
Chapter 5: Family Planning	**p. 99**
Chapter 6: Maternal and Newborn Health	**p. 123**
Chapter 7: Comprehensive Abortion Care	**p. 145**
Chapter 8: Gender-based Violence	**p. 157**
Chapter 9: Sexually Transmitted Infections	**p. 169**
Chapter 10: HIV	**p. 185**

3.1.5 How to analyse, use and disseminate assessment results?

The results of an assessment must be as specific as possible to allow for timely decisions on interventions to be made. They clearly prioritize needs and identify opportunities under each health system building block (see Box 14, p. 57). The results must offer suggestions on how to ensure MISP interventions are sustained and assist in planning the addition of comprehensive RH service components.

Share copies of the final report with all organizations involved in the humanitarian response, including the Ministry of Health (MoH), through the health sector/cluster coordination mechanism. Also communicate findings and decisions to the community.

3.2 Monitoring

Monitoring is the regular, ongoing collection, reporting and analysis of data throughout the duration of programme implementation and it is an essential part of any RH programme. Monitoring includes the timely dissemination of results so that action can be taken.

3.2.1 When to monitor?

A simple, routine information system that collects minimal reproductive health data is required from the onset of a humanitarian response and the implementation of the MISP (see Chapter 2). As the response evolves and more comprehensive RH service components are introduced, the monitoring requirements of RH programmes must adapt to reflect the changing needs upon which these components are planned, organized and delivered.

Health data can be collected as part of an existing national health information system (HIS). Where such a system does not exist or has been disrupted by the crisis, the health sector/cluster will implement an emergency monitoring system in order to support programme management and coordination. The periodicity of monitoring within such a system (e.g. daily, weekly or monthly) depends on the evolvement of the humanitarian response and the requirements of each organization. At least monthly data should be made available to inform regular programming decisions.

3.2.2 What are the tools for monitoring?

It is crucial to have tools and methods of collection that are common to all health partners to ensure that the data generated are standardised and of good quality. When utilized in a systematic and coordinated fashion by all partners, these resources help to ensure that data are collected to the same level of detail and are comparable across locations.

Routine RH data should be collected from a combination of health facility and community sources as part of the wider HIS. Sources of routine data include:

- Individual patient records and charts (e.g. partographs, antenatal cards, family planning cards);
- Daily registers and tally sheets (e.g. birth registers, antenatal tally sheets);
- Laboratory forms (e.g. HIV testing or syphilis screening results);
- Maternal death review forms (see Box 18);
- Community-based health workers/midwife reports;
- Weekly and/or monthly reporting forms.

The above list of tools is not exhaustive. Other data sources and methods of routine reporting (e.g. sentinel surveillance*) may need to be maintained alongside the HIS, according to the needs of each programme and/or agency. In some settings, population-based surveys can also be used as an effective tool to guide programme delivery. When repeated over time, these can provide a useful source of RH monitoring data.

3.2.3 What data is needed for monitoring?

The data required to monitor any RH programme are defined by the selection of indicators that are used to monitor progress of the programme towards a set of objectives. See Box 17 for definitions and issues to take into consideration when selecting and using RH indicators

Chapters 4 to 10 recommend key indicators that are used to monitor each component of a comprehensive RH programme (see table on page 61). A summary of each indicator including the formulae, units of expression and a corresponding standard is given in Annex 1B, p. 69.

A specific tool for monitoring RH programmes is a maternal death review (See Box 18) or a "near miss" review. Maternal death reviews and near miss reviews are critical in maternal and newborn health (MNH) programmes to promote and monitor changes in service delivery and to advocate for measures to prevent complications and deaths. (See Chapter 6: MNH.)

3.2.4 Who is responsible for monitoring?

Nurses, midwives and other RH service providers working in health facilities are responsible for the routine collection and reporting of service data. In addition, community-based health staff should also be involved in gathering community-level data. In order to ensure that data is comparable across different programmes, all such staff must receive adequate training on the correct use and application of data collection tools in the field.

The clinic supervisor is designated responsibility for compiling weekly or monthly reports. These are in turn sent to the RH or health programme manager for entry into and analysis with a computer.

* Sentinel surveillance is a monitoring method that uses a surrogate indicator for a public health problem, allowing estimation of the magnitude of the problem in the general population. For example the HIV prevalence in women attending antenatal care services is used as a proxy indicator for the HIV prevalence in the entire population.

Box 17: Selecting and Using RH Indicators

Indicators are defined as variables that can be monitored over time to track progress toward the achievement of objectives. *For example: "coverage of antenatal care".*

An **objective** is the desired end-point to be reached at the end of programme implementation. *For example: Obstetric risk factors are detected and managed early in pregnancy.*

Each indicator should be assigned a corresponding **standard** to establish the minimum acceptable level of achievement that is required. *For example: 90% of women attend four or more ANC visits during pregnancy.*

If RH programmes implemented by different actors do not utilize the same indicators, they are not standardised, and neither is the health information that they generate. Consequently, the data produced by non-standardised health programmes may be incomplete, cannot be aggregated and are unsuitable for monitoring a situation.

The process of indicator selection is not easy. Each indicator should be technically valid, simple and measurable. Furthermore, the expansion from MISP to comprehensive RH services within a country will open up new areas for monitoring and implementation that need to be continually taken into consideration. It is therefore recommended that any indicator should meet **SMART** criteria and should be:

S pecific (what and who)

M easurable

A ppropriate

R ealistic (achievable)

T ime bound

The mix of indicators selected for monitoring should also be appropriate to measure programme objectives across different stages of the project cycle. For example:

Output (or process) indicators measure actions needed for programme implementation and correspond to various activities necessary to achieve specified outcomes. *For example: the number of midwives trained in ANC protocols.*

Outcome (or performance) indicators measure changes that result from programme activities, such as changes in knowledge, attitudes and behaviours, or in availability of services. *For example: the number of women who receive at least two doses of Tetanus Toxoid (TT) prior to delivery.*

Goal (or impact) indicators measure changes in morbidity and mortality expected to result from programme activities. *For example: Incidence of neonatal tetanus.*

Table 8: Data Requirements for Monitoring:

Chapter 4: Adolescent Reproductive Health	**p. 97**
Chapter 5: Family Planning	**p. 121**
Chapter 6: Maternal and Newborn Health	**p. 137**
Chapter 7: Comprehensive Abortion Care	**p. 154**
Chapter 8: Gender-based Violence	**p. 167**
Chapter 9: Sexually Transmitted Infections	**p. 184**
Chapter 10: HIV	**p. 199**

Box 18: Maternal Death Review

A maternal death review provides a rare opportunity for health staff and community members to learn from a tragic — and often preventable — event. It can help identify gaps in services, gaps in knowledge (both on the health-care provider side and the community side) and the need to improve referral procedures for obstetric complications. It is important to include multiple people (family members, TBAs, midwives, doctors, coordinators, community leaders, etc.) in the process of reviewing a maternal death, regardless of whether the death occurred in the community or in a health facility.

Points to be investigated include:

- Time of onset of life-threatening illness
- Time of recognition of the problem and time of death
- Timeliness of actions
- Access to care, or logistics of referral
- Quality of medical care until death

Verbal autopsy, which has been used in certain refugee situations, has proved relatively successful when medical records are unavailable.

Annex 4 provides a sample maternal death investigation form and guidelines for use.

3.2.5 How to analyse, use and disseminate monitoring results

Analysis of routinely collected health service or population-based data is essential for monitoring the performance and quality of health service delivery and in identifying changes in the health status of the affected population.

At the facility-level, statistics can be analysed manually by posting results on charts showing usage statistics in the reception area of the clinic. At organizational and health sector/cluster level, more efficient means of data management are required to ensure that results are analysed, disseminated and used in a timely and effective manner. Simple computer spreadsheet or database software is useful in helping to manage large volumes of data over time and across different locations.

The use of data and feedback of results is integral to ensuring that the information is translated into public health practice and measurable improvements in the reproductive health status of the population. Often lower-level managers are

required to report vast quantities of data to higher levels but they rarely receive any feedback. At the same time, the information overload at higher levels is such that in practice the data are seldom used effectively. RH programme managers must give regular feedback to staff and also discuss the main findings and recommendations for RH programming, based on recent results at health sector/cluster coordination meetings. Where appropriate, make reproductive health available to the population served by the health facility.

3.3 Evaluation

The purpose of an evaluation is to analyse the efficiency and effectiveness of a programme. It compares programme activities and services (outputs) with benefits (outcomes) and public health impact (goals) and helps RH officers to determine whether these met defined objectives.

3.3.1 When to evaluate?

It is important to schedule and plan for evaluations from the start of programme implementation. Evaluations happen throughout the life of a project, not just at the end, and are timed according to the stages of project implementation and the needs of the organization.

3.3.2 What are the tools for evaluation?

Evaluations use systematic appraisal methods, and measure both qualtitative and quantitative aspects of service delivery. They can utilize similar methods to those used in assessments (see 3.1.1). Key informant interviews with community leaders or members from the affected population gather data to evaluate programme quality and acceptability.

An evaluation of the quality or accessibility of services includes a review of operational documents (such as site reports, mission reports, supervision reports, training records) and a qualitative health services checklist. Also view the data collected from the monitoring system as part of the evaluation process.

Population-based data can be collected to supplement and/or validate routinely collected data.

3.3.3 What data is needed in evaluation?

It is important to clearly specify the objectives of any evaluation and to clearly define the questions which the evaluation should answer. Typical questions which should be considered in evaluating project outputs and the project itself are:

- What did we do?
- What did we achieve?
- Did we achieve what we intended?
- What lessons have we learned?
- What else is needed?

3.3.4 Who is responsible for evaluation?

Evaluations must be as objective and unbiased as possible. If the evaluator is also involved in programme coordination or management, it can sometimes be difficult for this person to remain a neutral participant and to view the programme in an impartial manner. For this reason, it is useful for evaluations to be carried out by external evaluators.

3.3.5 How to analyse, use and disseminate evaluation results?

Evaluations should reflect both on what is working well and what is not working well, in order for the results to improve programme planning and design. Early feedback should be provided to programme managers and service providers to ensure that issues that are identified are dealt with promptly before they become problems or risks. The final evaluation report should be shared with all organizations involved in the emergency response, including the MoH, and disseminated at health sector/cluster coordination meetings. If appropriate, findings and decisions should also be shared directly with the community.

4.0 Human rights and legal considerations

4.1 Human rights standards

The right to privacy under international human rights law protects the right to privacy and confidentiality of health information, including about a person's reproductive health, reproductive functions, sexual life or sexuality. The right to privacy, therefore, imposes an obligation on service providers and others who collect health-related data to keep this information confidential. In a health-care setting, information about the health status of a patient may be shared with those directly involved in the treatment of a patient if this is needed for the treatment.

A person's right to privacy may, for example, be violated when their reproductive health status is discussed with someone else by a service provider without her authorization. Not only would this breach of confidentiality infringe on that person's right to privacy, but it could also cause significant protection problems for the person concerned, as it could lead to rejection by family members or the community, violence or threats of violence, or discriminatory treatment in accessing services.

Key points to be kept in mind to ensure respect for the right to privacy include:

- The confidentiality of an individual who provides information about his or her reproductive health status, including incidents of gender-based violence, must be protected at all times.
- Anyone providing information about her reproductive health status, including incidents of gender based violence, must give informed consent before participating in data-gathering activity.

Information must be kept confidential at all times including when it is collected, stored, analysed, shared and otherwise used. The right to privacy also applies to children, including within the health-care setting. Although information on the health status of children should not be disclosed to third parties, including parents, without the child's consent, this, of course, is subject to the age and maturity of the child, as well as to a determination of his or her best interests.

4.2 National legal considerations

Those who have access to health information must ensure that they take appropriate measures to ensure the confidentiality of the health information. Guidance about national laws and regulations on collection, storage and use of this health information should be available to health and humanitarian workers, and all health workers must be familiar with these rules.

Collection and use of data for monitoring and evaluation purposes also requires informed consent of the person providing the information. This includes data collection where the information will be anonymised and delinked from the name and other identifiers of the respondent. The aim of the informed consent process is to ensure that respondents are aware of, and understand, the purpose and content of the data collection exercise, the procedures that will be followed during the course of the exercise, the risks and the benefits of their participating, and their rights. As part of the informed consent process, the potential participant must be given information about each of these elements, through what is often referred to as a "statement of consent".

Everyone should also be informed that they have the right to not participate in the data collection or to refuse to answer particular questions. If, for a specific purpose, information concerning an individual's health status needs to be disclosed to a third party, the prior informed consent of the person concerned needs to be obtained. In the case of information relating to children, the informed consent must be provided by a parent or guardian unless local laws state otherwise. In addition, children who are of an age to be able to understand the nature and implications of the information

gathering and disclosure (i.e. are developmentally capable) must also give their consent.

4.3 Challenges and opportunities

In some settings service providers are required by national laws to report to authorities people testing positive for HIV, women who have undergone abortion or certain cases of sexual violence. While official justifications for these policies and laws may include crime prevention or public health concerns, it is important to note that they may not be in accordance with international human rights standards and may violate the right to privacy. Service providers need to be familiar with such laws and policies and their obligations. As part of the informed consent process, patients must be informed of any relevant limits to confidentiality. Where mandatory reporting rules are in place, service providers should explain the reporting mechanism to the patient and tell them what they can expect after a report is made.

5 Further reading

Health cluster tools and indicators

http://www.who.int/hac/global_health_cluster/guide/tools/en/index.html

Monitoring and Evaluation Toolkit. Reproductive Health for Refugees Consortium (RHRC), October 2004. http://www.rhrc.org/resources/general%5Ffieldtools/toolkit/index.htm

Reproductive Health Assessment Toolkit for Conflict-Affected Women. Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, Coordinating Center for Health Promotion, Centers for Disease Control and Prevention, Department of Health and Human Services, Atlanta, GA, 2007. www.cdc.gov/reproductivehealth/refugee/ToolkitDownload.htm, www.cdc.gov/reproductivehealth/refugee/

Assessment of "Minimum Initial Services Package" Implementation, Women's Commission for Refugee Women and Children. http://www.rhrc.org/pdf/MISP_ass.pdf

Monitoring Implementation of the MISP: A Check List, Women's Commission for Refugee Women and Children, January 2003. www.rhrc.org/pdf/fs_misp_insert.pdf

Health Information System. UNHCR, 2007. www.unhcr.org/his

Demographic Methods in Emergency Assessment: A Guide for Practitioners. Center for International Emergency, Disaster and Refugee Studies (CIEDRS) and the Hopkins Population Center; Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD, 2003. http://www.humanitarianinfo.org/IMToolBox/05_Assessments/Reference_Resource_Documents/2003_Demographic_Methods_In_Emergency_Assessment_CIEDRS.pdf

List of annexes

The following indicators are a selection of core indicators that can be used to monitor a comprehensive RH programme. They are not sufficient for in-depth monitoring and evaluation of a programme. For more detailed lists, see the further reading sections in the relevant chapters.

Annex 1A: RH indicators for the MISP

Annex 1B: RH Indicators for Comprehensive RH programmes

Annex 2: RH reference rates and ratios

Annex 3: Estimating number of pregnant women in the population

Annex 4: Maternal death review form and guidance sheet

Annex 5: Sample monthly worksheets (HIS)

Annex 1A: MISP Indicators

#	Indicator Name	Type	Description	Formula	Units	Standard	Remarks
1.	Number of Reported Rape Cases	Impact	Number of rape cases reported to health facilities within a time period	Number of rape cases reported to health facilities/ time period	Time period for reporting to be set locally		Disaggregated by sex and age groups It is not possible to identify trends (temporal, geographical or otherwise) in rape cases based on this data nor is it possible to measure incidence Note the number of facilities contributing this information each time period
2.	Coverage of Supplies for Standard Precautions	Output	The percentage of health delivery sites with sufficient supplies to ensure standard precautions can be practiced	Number of health service delivery points with adequate supplies to carry out standard precautions/number of health service delivery points × 100	/100 health service delivery points	100% of health facilities have adequate supplies to carry out standard precautions	Measures the effectiveness of distribution of supplies related to standard precautions. "Sufficient supplies" are reported by each service point supervisor based on the workload. Should be disaggregated by soap, clean injection materials, gloves, sharps disposal supplies, and sterilizing equipment and supplies
3.	Coverage of HIV Rapid Tests for Safe Blood Transfusion	Output	The percentage of referral hospitals that have sufficient HIV rapid tests to ensure all blood destined for transfusion is screened	Number of hospitals with sufficient HIV rapid tests to screen blood for transfusion /number of health service delivery points × 100	/100 health service delivery points	100% of health facilities have adequate supplies to carry out standard precautions	Measures the effectiveness of distribution of HIV tests to screen blood for transfusion. "Sufficient HIV tests" are reported by the service supervisor based on the caseload
4.	Condom Distribution Rate	Outcome	Rate of condom distribution among the population	Number of male condoms distributed /total population/ month	/person/ month	0.5 condoms / person / month	The standard 0.5 condoms/person/month is an approximation of the more complicated standard condom calculation as described in the MISP chapter on page 40. The approximation is used to monitor condom distribution as part of the MISP
5.	Coverage of Clean Delivery Kits	Output	Rate of distribution of clean delivery kits among pregnant women in their third trimester	Number of clean delivery kits distributed / Estimated number of pregnant women x 100/month	%	100%	Measures whether women in late pregnancy have access to clean delivery kits. May have to estimate number of pregnant women
6.	Availability of clinical management of rape survivors	Output	Percentage of health facilities with clinical management of rape survivors, including EC, PEP and presumptive STI treatment	Number health facilities offering clinical management of rape survivors / all health facilities x 100	%		Provision of clinical management of rape survivors requires the availability of trained staff, emergency contraception, ARVs for PEP and antibiotics for presumptive STI treatment

Annex 1B: Indicators for Comprehensive RH Programmes

This is a selection of indicators that are used to monitor comprehensive RH programmes. There may be other indicators. RH officers must decide which indicators to use based on their situation. The references in the further reading sections in each chapter provide more suggestions.

#	Indicator Name	Type	Description	Formula	Units	Standard	Remarks
A. Adolescent Reproductive Health							
7.	Incidence of STDs in young people	Impact		Number of reported cases of STDs among young people by the specified time period / Total number of young people (x1000)	/1000 young people		Measures a programme's potential impact on the incidence of STDs among young people. Need to define age group for young people relevant to local situation.
8.	Proportion of STI among those under 18 years	Process	Proportion of syndromic STIs diagnosed among under 18s	Number of STIs diagnosed among under 18s / Total number of STIs diagnosed x 100	%		
9.	Proportion of births among those under 18 years	Impact	Proportion of births recorded among under 18s	Number of deliveries among women under 18 / Number of live births x 100	%		Measures how common births are among young women.
10.	Condom use among young people	Outcome	Proportion of sexually active young people reporting condom use at last intercourse	Number of sexually active young people reporting condom use at last intercourse / Number of sexually active young people surveyed x 100	%		Measures the impact of a community-education programme about condom use on young people's behaviour. Disaggregated by sex and age groups. Requires a population-based survey.
B. Family Planning							
11.	Contraceptive prevalence (CP)	Outcome	Proportion of women of reproductive age (15-49) who are using (or whose partner is using) a contraceptive method	Number of women of reproductive age using any method of contraception/ Number of women of reproductive age x100	%		Measures what per cent of women is using contraception. Knowledge of the CP in country of origin will assist in setting the target.
12.	Community knowledge concerning family planning	Outcome	Proportion of sexually active persons able to cite major messages about family planning	Number of sexually active persons able to cite major messages about family planning / Number of sexually active persons targeted for family planning messages x 100	%		Measures knowledge of family planning in the population and is based on the major messages given during awareness activities. Requires a population-based survey.

#	Indicator Name	Type	Description	Formula	Units	Standard	Remarks
13	Contraceptive supply	Outcome		Number of service delivery points which maintain a minimum of 3 months' supply of each of combined oral contraceptive pills, progestin-only pills, and injectables / Number of service delivery points x 100	%		Measures effectiveness of contraceptive supply distribution system.
14.	Coverage of FP counseling	Outcome	Proportion of clients attending FP services, who are offered counselling	The number of clients attending FP services who are offered FP counselling in addition to receiving a method of contraception / number of clients attending FP services x 100	%		Measures whether clients are counselled by FP service providers. The indicator is measured in FP clinics and is available from clinic records, observation, or client exit interviews
C. Maternal and Newborn Health							
15.	Neonatal mortality rate	Impact	Rate of deaths among newborns within the first 28 days of life	Number of live born infants who die< 28 days of age / Number of live births in the specified time period × 1000	/ 1000 live births	< 40 deaths /1000 live births	Measures the overall health status of newborns.
16.	Proportion of low birth weight	Impact	Proportion of live births that were less than 2500 g	Number of live born infants weighing<2,500 g / Total number of live births (with birth weight recorded) x 100	%	< 15%	Measures the health status of pregnant women and the adequacy of antenatal care. Birth weights also identify infants at higher risk who may need special care.
17.	Stillbirth rate	Impact	Rate of still births in proportion to number of births	Number of still birth period / Total number of live births and stillbirths x 1000	/ 1000 total births / month		A general measure of pregnancy outcome. May be elevated during outbreaks of diseases such as malaria or syphilis. Verify definition of stillbirth based on national policies. Still birth is defined as a fetal death after 22 weeks in most settings.
18.	Investigation of maternal deaths	Process	Proportion of reported maternal deaths which are investigated	Number of reported maternal deaths which are investigated / Total number of reported maternal deaths x 100	%	100%	Measures the programme's capacity to identify all maternal deaths and to determine the risk factors that contribute to those deaths. Assumes that: a) both indirect and direct maternal mortality events are investigated, to reduce under- reporting; b) a protocol for investigations is in place. Investigation should be done according to established guidelines, and the results disseminated to health staff.

#	Indicator Name	Type	Description	Formula	Units	Standard	Remarks
19.	Complete ante¬natal care	Outcome	Percentage of pregnant women who made at least 4 antenatal visits during pregnancy	Number of pregnant women who had made at least 4 ANC visits at the time of delivery / total number of live birth x 100	%	100%	Measures whether pregnant women are receiving minimal antenatal visits. This indicator is measured at the time of birth.
20.	Coverage of syphilis screening	Outcome	Proportion of pregnant women who were screened for syphilis during pregnancy	Number of pregnant women who had been screened for syphilis during the antenatal period at the time of delivery / Total number of live births x 100	%	100%	Measures whether pregnant women are being screened for syphilis. This indicator is measured at the time of birth.
21.	Tetanus vaccination coverage	Outcome	Proportion of pregnant women who received at least 2 doses of tetanus toxoid (TT) vaccine during pregnancy	Number of pregnant women who had received 2 doses of TT (or were fully vaccinated) during the antenatal period at the time of delivery / Total number of live births x 100	%	100%	Measures whether women of reproductive age are being vaccinated with tetanus toxoid.* This indicator is measured at the time of birth .Neonatal tetanus cases should also be reported.
22.	EmOC services availability	Outcome	Number of health facilities with basic and/or comprehensive essential obstetric care / 500,000 population, by admin unit	Number of EmOC facility per population	/ 500,000 population	At least 5 EmOC facilities/ 500 000 population, including at least 1 CEmOC	UN process indicator 1
23.	EmOC services utilization	Outcome	Proportion of all births in emergency obstetric care facilities	Number of deliveries in an EmOC centre / Number of deliveries x 100	%	Acceptable levels to be set locally	Deliveries are irrespective of outcome (live or still birth). All EmOC should be included; camp based, government hospital.
24.	EmOC needs met	Outcome	Proportion of women with major direct obstetric complications who are treated in EmOC facilities	Number of obstetric complications treated at EmOC / number of deliveries x 100	%	100%	Measures the quality of management of obstetric emergencies. Emergencies should have clear case definition and include: hemorrhage, eclampsia, obstructed/prolonged labour, sepsis.
25.	Percentage of births assisted by a skilled attendant	Outcome	Proportion of births attended by skilled health worker*	Number deliveries attended by a trained health worker / Number of deliveries x100	%	100%	Trained health workers defined as doctors and/or persons with midwifery skills who can diagnose and manage obstetrical emergencies as well as normal deliveries. Traditional birth attendants (trained or untrained) are not included.

#	Indicator Name	Type	Description	Formula	Units	Standard	Remarks
26.	Coverage of post-partum care	Outcome	Proportion of women who received 3 postnatal visits within six weeks of delivery	Number of women attended for post-natal care 3 times within 6 weeks of delivery / Number of live births x 100	%	100%	Measures whether women receive postpartum visits. Postpartum period defined as 42 days (6 weeks) following delivery. Factors determining the timing of the visit include: incidence and type of obstetric complications, the percent of low birth weight births, the proportion of home deliveries, and the neonatal mortality rate, among others. Recommended schedule for attendance at 6 hours, 6 days and 6 weeks.
27.	Percentage of deliveries by Caesarean section, by administrative unit	Outcome	Caesarean sections as a proportion of all births	Number of births by caesarean section /number of live births x 100	%	5%-15%	The estimated proportion of births by caesarean section in the population is not less than 5% or more than 15%.
28.	Direct obstetric case fatality rate	Impact	The case fatality rate among women with direct obstetric complications in EmOC facilities	Number of women attending EmOC facilities who die of a direct obstetric complication/ women attending seen for a direct obstetric complication x 100	%	<1%>	
D. Comprehensive Abortion Care							
29.	Abortion services performed with appropriate technology	Process	Proportion of abortion services performed with appropriate technology (vacuum aspiration or medical methods)	Number of abortion services performed with appropriate technologies / Number of all abortion services performed in the same period x 100	%	100%	"Abortion services" include treatment of abortion complications (resulting from either spontaneous or induced/unsafe abortion) as well as provision of induced abortion procedures. Appropriate technology for abortion services, see Chapter 7: Comprehensive Abortion Care.

#	Indicator Name	Type	Description	Formula	Units	Standard	Remarks
30.	Coverage of post-abortion contraception	Outcome	Proportion of women accessing abortion services who receive contraception prior to discharge from the facility	Number of women receiving abortion services who obtain a modern contraceptive method before leaving the facility / Number of all women receiving abortion services in same facility in the same period	%	60%	"Abortion services" include treatment of abortion complications (resulting from either spontaneous or induced/unsafe abortion) as well as provision of induced abortion procedures. The minimum recommended level is that at least 60% of the women receiving abortion care also receive a modern method of contraceptive methods prior to discharge from the facility. This is consistent with evidence on reproductive intentions among women obtaining abortion services, as well as tested models of successful postabortion contraceptive uptake. Data collection is through routine facility logbook.
31.	Awareness of legal indications for termination of pregnancy	Outcome	Percentage of providers who are aware of the legal indications for a termination of pregnancy in the host country and country of origin	Number of providers involved in abortion services who are aware of the legal indications for termination of pregnancy / Number of providers involved in abortion services x 100	%	100%	Data collection is through periodic surveys.
32.	Coverage of induced abortion	Outcome	Proportion of women who receive abortion services that receive induced procedures	Number of women receiving induced abortion procedures at a facility / Number of all women receiving abortion services in the facility in the same time period x100	%	100%	Over time, a shift toward a higher proportion of women receiving induced abortion as part of all abortion services in facility. Data Source: Health service records—but potential problems with underreporting (i.e. omission of cases not admitted to facilities) and misclassification.
E. Gender-based Violence (GBV)							
33.	Timing of PEP provision	Outcome	Proportion of eligible rape survivors who receive post-exposure prophylaxis (PEP) within 72 hours of an incident occurring	Number of eligible rape survivors who receive PEP within 72 hours of an incident / Total number of rape cases reported x 100	%	100% of eligible rape survivors	Measures whether rape survivors have timely access to critical services. Assumes protocols for clinical management of rape are disseminated and applied.

#	Indicator Name	Type	Description	Formula	Units	Standard	Remarks
34.	Timing of emergency contraception (EC) provision	Outcome	Proportion of eligible rape survivors who receive emergency contraception (EC) within 120 hours of an incident occurring	Number of eligible rape survivors who receive EC within 120 hours of an incident / Total number of rape cases reported x 100	%	100% of eligible rape survivors	Measures whether rape survivors have timely access to critical services. Assumes protocols for clinical management of rape are disseminated and applied.
35.	Timing of STI prophylaxis	Outcome	Proportion of rape survivors who receive presumptive STI treatment within 2 weeks of an incident occurring	Number of rape survivors who receive presumptive STI treatment within 2 weeks of an incident / Total number of rape cases reported	%	100% of eligible rape survivors	
36.	Number of cases of sexual violence reported to health services	Impact	Number of cases of sexual violence reported to health facilities within a time period	Number of cases of sexual violence reported to health services/month	/10 000 population		Case definitions of "Sexual Violence" to be determined in each setting Disaggregate by sex and age It is not possible to identify trends (temporal, geographical or otherwise) in sexual violence cases based on this data Note the number of facilities contributing this information each month
F. Sexually Transmitted Infection (STIs)							
37.	STI/RTI management skills of service providers	Process	% of service providers trained (or retrained) to manage STI/RTI cases according to protocol	Number of service providers trained to manage STI/RTI cases according to protocol / total number of service providers x 100	%		Available from STI/RTI programme records.
38.	STI/RTI case management	Outcome	% of patients with STI/RTI assessed, treated and counselled according to protocol	Number of patients with STI/RTI assessed, treated and counselled according to protocol / total number of patients with STI/RTI accessing services x 100	%		Data to be disaggregated by age and sex. The indicator is measured in STI clinics, as well as in other RH services integrating STI/RTI and is available from clinic records, observation, or client exit interviews.
39.	Incidence of genital ulcer disease	Impact	Incidence of genital ulcer disease among total population	Number of cases of genital ulcer disease / Total population x 1000	/ 1000 population / month		

#	Indicator Name	Type	Description	Formula	Units	Standard	Remarks
40.	Incidence of male urethral discharge	Impact	Incidence of male urethral discharge among male population	Number of cases of male urethral discharge reported / Total male population x 1000	/ 1000 population / month		
G. HIV/AIDS							
41.	Quality of blood donation screening	Outcome	Percentage of donated blood units screened for HIV in a quality assured manner	Number of donated blood units screened for HIV in a quality assured manner / Total number of donated blood units screened x 100	%	100%	Measure blood safety for transfusion. Assumes blood transfusion kits are available and used correctly. UNGASS indicator.
42.	VCT post-test counselling and result	Outcome	Proportion of VCT clients tested for HIV, who received post-test result and counselling	Number of VCT clients post-test counselled / Number of VCT clients tested x 100	%	100%	Indirect measure of the quality of counseling and testing within a VCT programme.
43.	PMTCT coverage	Outcome	Proportion of first time ANC visits who were pre-test counselled	Number of first ANC visits pre-test counselled / Number of first ANC visits	%	100%	
44.	PMTCT post-test counselling and result	Outcome	Proportion of first ANC visit clients tested for HIV, who receive post-test result and counselling	Number of first ANC visit clients who receive post-test result and counseling / Number of first ANC visit clients tested for HIV x 100	%	100%	Indirect measure of the quality of counseling and testing within a PMTCT programme.
45.	Coverage of ARV in PMTCT programmes	Outcome	Ratio of mother-newborn pairs that swallowed ARV on time	Number of mother-newborn pairs who swallowed ARV according to protocol / Total number HIV positive deliveries x 100	%	100%	
46.	Condom use	Outcome	Proportion of sexually active people reporting condom use at last intercourse	Number of sexually active people reporting condom use at last intercourse / Number of sexually active people surveyed x 100			Measures the impact of a community-education programme about condom use on people's behaviour. Disaggregate by sex and age groups. Requires a population-based survey.

Annex 2: RH Reference Rates and Ratios

The figures shown here have been collected from various sources and cover different periods. They are intended to give estimates of what may be expected in some populations. These figures are not to be used as definitive baseline rates or as rates to be achieved. They merely indicate the possible range and may assist with resource planning and with targeting specific programmes.

Abortions	10-15%	of all pregnancies may spontaneously abort before 20 weeks gestation
	90%	of these will occur during the first three months
	15-20%	of all spontaneous abortions that occur require medical interventions
Hypertensive Disorder of Pregnancy (HDP) or Pre-eclampsia	5-20%	of all pregnancies will develop HDP
	5-25%	of all primigravida pregnancies will develop HDP
Labour and Delivery Complications	15%	of all pregnancies will require some type of intervention at delivery
	5-15%	of all pregnancies will require a Caesarean section
	10-15%	of all women will have some degree of cephalopelvic disproportion (higher in poorer socioeconomic populations)
	10%	of deliveries will involve a primary postpartum haemorrhage (within 24 hours of delivery)
	0.1-1.0%	of deliveries will involve a secondary postpartum haemorrhage (occurring 24 hours or more after delivery)
	0.1-0.4%	deliveries will result in uterine rupture
	0.25-2.4%	of all deliveries will result in some type of birth trauma to the baby
	1.5%	of all births will have a congenital malformation (does not include cardiac malformations diagnosed later in neonatal period).
	31%	of these malformations will result in death.

Data Sources: WHO Collaborating Centre in Perinatal Care and Health Services Research in Maternal and Child Health, Pregnancy and Infant Health Branches, Division of Reproductive Health, NCCDPHP, Centers for Diseases Control and Prevention, Atlanta, GA., 30333 USA Sing, S. and Wulf, P., Estimated Levels of Induced Abortion in Six Latin American Countries, International Family Planning Perspectives, 1994, 20 (1): 4-13.

Annex 3: Estimating the Number of Pregnant Women in the Population

Estimating Number of Pregnant Women in the Population If Total Population Is 100 000				
If CBR is (per 1,000 population)	55	45	35	25
a) Estimated number of live births in the year	5500	4500	3500	2500
b) Estimated live births expected per months (a/12)	458	375	292	208
c) Estimated number of pregnancies that end in still-births or miscarriages (estimated at 15 per cent of live births = a ´ 0.15)	825	675	525	375
d) Estimated pregnancies expected in the year (a + c)	6325	5175	4025	2875
e) Estimated number of women pregnant in a given month (70 % of d)*	4400	3600	2800	2000
f) Estimated % of total population who are pregnant at a given period	4.4	3.6	2.8	2
* This is a weighted estimate of full-term pregnancies plus those pregnancies that terminate early				

Annex 4: Maternal Death Review Form and Guidance Sheet

UNHCR
United Nations High Commissioner for Refugees
Haut Commissariat des Nations Unies pour les réfugiés

*****Confidential*** Maternal Death Review Report**

Audit every maternal death and e-mail this report to relevant parties within your IP and UNHCR (see guideline)

Maternal Death: The death of a woman while pregnant or within 42 days of the end of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes

REVIEWERS:
List individuals involved in reviewing the death (names & titles / relationship to deceased):

1.
2.
3.
4.
5.
6.
7.
8.

SUMMARY INFORMATION:

Host country:	Camp, settlement or area:	
Woman's name:	Nationality:	Age:

INFORMATION ON PREGNANCY:

Gravida:	Parity:	No. ANC visits:	Performed by (qualification only):

Risk factors identified during antenatal visits:

☐ Anaemia ☐ Severe malaria ☐ High parity (above 4 pregnancies)

☐ Ante-partum haemorrhage ☐ Hypertension ☐ Previous caesarean section

☐ HIV/AIDS ☐ Diabetes mellitus ☐ Multiple pregnancy

☐ None ☐ Others (specify):

Number of postnatal visits:	When (e.g. first 24 hours, 1 day, 1 week…):

INFORMATION ON DEATH:

☐ Did not deliver: Suspected gestational age at the time of maternal death: ☐ weeks ☐ months

☐ Delivered/Aborted: Time between delivery / abortion and maternal death: ☐ hours ☐ days

Location of death:

☐ Home; ☐ On route; Specify details:

☐ Camp Health Facility
☐ Referral Health Facility
} Date & time of admission:
Date & time of death:

SUMMARIZED HISTORY OF IMMEDIATE EVENTS:

IDENTIFIED RELEVANT DELAY FACTORS:

☐ Factors related to the 1st delay (delay in deciding to seek care)?

1.
2.
3.

☐ Factors related to the 2nd delay (delay in reaching care)?

1.
2.
3.

☐ Factors related to the 3rd delay (delay in receiving appropriate care at facility)?

1.
2.
3.

CAUSE OF DEATH:

Direct (e.g.: haemorrhage, obstruction, eclampsia, sepsis, etc.):
Indirect (e.g.: anaemia, HIV/AIDS, malaria, etc.):

LESSONS LEARNED	ACTION TO BE TAKEN / PROPOSED SOLUTIONS

Date(s) of maternal death review:	Date of report:

Report compiled by (name & title):

UNHCR
United Nations High Commissioner for Refugees
Haut Commissariat des Nations Unies pour les réfugiés

Guideline for Reviewing Maternal Deaths

The purpose of this guideline is to support country programs in:

A) The *process of reviewing* a maternal death, and
B) The *requirements for reporting* a maternal death

A) THE PROCESS OF REVIEWING A MATERNAL DEATH

What is a maternal death?

A maternal death is the death of a woman while pregnant or within 42 days of the end of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.

Should each maternal death be reviewed?

Yes. Every maternal death that occurs within a refugee camp (of a refugee or a national) or at a referral health facility should be systematically reviewed.

What is the purpose of reviewing a maternal death?

A maternal death review provides a rare opportunity for a group of health staff and community members to learn from a tragic – and often preventable - event. Maternal death reviews should be conducted as learning exercises that do not include finger-pointing or punishment. The purpose of a maternal death review is to improve the quality of safe motherhood programming to prevent future maternal and neonatal morbidity and mortality.

What process should be used to review a maternal death?

There are 2 main methodologies for reviewing maternal deaths that are relevant to a refugee setting:

1) **Community-Based Maternal Death Review / Verbal Autopsy**
   Definition: A method of finding out the medical causes of death and ascertaining the personal, family or community factors that may have contributed to the death of a woman who died outside of a medical facility
   Requirements: Cooperation from the family of the woman who died and sensitivity is needed in discussing the circumstances of the death
   Advantages: Provides means to arrive at medical cause of death when a woman dies at home, allows both medical and non-medical factors to be explored, and provides the opportunity to include the family's perspective on health services
   Disadvantages: Different assessors may arrive at different causes of death, deaths from indirect causes may be overlooked / underreported

2) **Facility-Based Maternal Death Review**
   Definition: A qualitative, in-depth investigation of the causes of and circumstances surrounding a maternal death at a health facility; the death is initially identified at the facility level but such reviews are also concerned with identifying the combination of factors at the facility and in the community that contributed to the death, and which ones were avoidable
   Requirements: Cooperation from those who provided care to the woman who died, and their willingness to report accurately on the management of the case
   Advantages: Is a well-understood process in some settings, allows for complete review of medical aspects, provides a learning opportunity for all staff, and can stimulate improvements to medical care
   Disadvantages: Requires committed leadership at the facility level, does not provide information about deaths occurring in the community

A 3rd, additional methodology for improving safe motherhood programs is optional for country programs with the necessary capacity:

3) **"Near Miss" Review**
   Definition: The identification and assessment of cases in which a pregnant woman survives an obstetric complication; there is no universally acceptable definition for such cases and it is important that the definition used be appropriate to local circumstances to enable local improvements in maternal care
   Requirements: Good-quality medical record system, a management culture where life-threatening events can be discussed freely without fear of blame, and a commitment from management and clinical staff to act upon findings
   Advantages: A "near-miss" may occur more frequently than a maternal death, it is possible to interview the woman herself during the review process, and can reduce the likelihood of future maternal deaths through quality improvement
   Disadvantages: Requires clear definition of severe maternal morbidity, selection criteria are required for settings with a high volume of life-threatening events

B) THE PROCESS OF REPORTING A MATERNAL DEATH

Should each maternal death be reported?

Yes. The accompanying report form (or a substitute format available in your location) should be completed electronically for each maternal death review and e-mailed (at minimum) to:

- The UNHCR Health Coordinator, and
- The UNHCR Regional Reproductive Health Officer, and
- Other relevant staff (e.g. IP Health Coordinator, other partner agencies, etc.)

How do I complete the* REVIEWERS *section of the form?

It is important to include multiple people in the process of reviewing a maternal death, regardless of whether the death occurred in the community or in a health facility. Some examples of people you might want to include are:

- Relevant family members (sister, husband, boyfriend, parent(s), friend(s), etc.)
- Relevant health staff (TBAs, midwives, doctors, managers, coordinators, etc.)
- Relevant community leaders (religious, elders, women's association, youth, etc.)

How do I complete the* INFORMATION *sections of the form?

These three sections (summary information, information on pregnancy, information on death) allow you to document basic information pertaining to the woman who died. There might be additional factors specific to your location that you discuss during the review (e.g. the woman's address, her religion, etc.) that you do not need to document in the summary report.

How do I complete the* SUMMARIZED HISTORY *section of the form?

This section allows you to summarize the story of what happened. It is intentionally open-ended so that you can include the immediate events surrounding different types of maternal deaths. Some elements you might want to include (in both the review process and the report) are:

- Timeline of relevant events that have not already been documented
- Summary of the interventions / treatment provided prior to the death
- Relevant patient history not already documented

How do I complete the* RELEVANT DELAY FACTORS *section of the form?

This section encourages you to review and document the relevant delay factors by using the *Three Delay Model* for maternal mortality. Remember that there may be important community-level factors related to a death in a health facility, just as there may be important facility-level factors related to a death in the community.

How do I complete the* CAUSE OF DEATH *section of the form?

Some examples of direct causes of maternal death are:

Ectopic pregnancy	Eclampsia	Sepsis
Obstructed labour	Antepartum hemorrhage	Post-partum hemorrhage
Abortion complications	Anaesthetic complications	Embolism

Some examples of indirect causes of maternal death are:

Anaemia	Malaria	HIV/AIDS
Heart disease	Substance abuse	Diabetes

How do I complete the* LESSONS LEARNED & ACTION TO BE TAKEN *section of the form?

This will likely be the most important component of your maternal death review. After analyzing all of the relevant information, individuals involved need to agree on key lessons learned from the process and commit to action that will improve these areas in the future. It is important to consider lessons and action related to both the community and to the health facility.

Annex 5: Sample Monthly Worksheets (HIS)*

Health Information System

Reporting Form

Organisation: _____

Location: _____

Reporting period: _____

9.0 Reproductive Health

9.1 Antenatal Care

9.1a

	Refugee		National	
	< 18	≥ 18	< 18	≥ 18
First antenatal visit < 1st trimester				
First antenatal visit > 1st trimester				
Repeat antenatal visit				
Number of syphilis tests conducted				
Number of syphilis tests positive				
Number of contacts of syphilis positive cases treated				
Number of high-risk pregnancies detected				
Number of abortions				

9.1b *Enter number of pregnant women at time of delivery who:*

	Refugee		National	
	< 18	≥ 18	< 18	≥ 18
Received 4 or more antenatal visits				
Received 2 doses of tetanus toxoid during antenatal period				
Received at least 2 doses of fansidar during antenatal period				
Were screened for syphilis during antenatal period				
Received 1 dose of mebendazole during antenatal period				
Received 1 ITN* during antenatal period				

9.2 Delivery Care

	Refugee				National	
	< 18		≥ 18		< 18	≥ 18
	Home	Health Facility	Home	Health Facility		
Live births						
Still births						
Low Birth Weight (< 2500g)						
Attended by a skilled health worker**						
Number of obstetric complications treated						
Number of caesarean sections performed						

* ITN = Insecticide Treated Net ** excluding TBA

** This form is designed specifically for refugee situations. It should be adapted to depending on the setting.*

9.3 Postnatal Care

	Refugee		National	
	< 18	≥ 18	< 18	≥ 18
Attended for 3 postnatal visits within 6 weeks of delivery				

9.4 Family Planning (see separate reporting pad) (page 86)

9.5 Sexual and Gender Based Violence (SGBV)

	Refugee				National
	< 18		≥ 18		
	Male	Female	Male	Female	
Total no. of rape survivors seen within 72 hours*					
Total no. of rape survivors seen within 72 - 120 hours*					
Total no. of rape survivors seen within 120 hours - 2 weeks*					
Total no. of rape survivors seen after 2 weeks*					
No. rape survivors given PEP** within 72 hrs					
No. female rape survivors given ECP*** within 120 hrs					
No. rape survivors given STI presumptive treatment < 2 wks					
No. cases of trauma in health post due to domestic violence					

* of an incident occuring; ** PEP = Post Exposure Prophylaxis; *** ECP = Emergency Contraceptive Pill

Health Information System

Reporting Form

9.4 Family Planning

Organisation: _____

Location: _____

Reporting period: _____

	Cumulative number at start of period (a)	Refugee New Users (b) < 18	Refugee New Users (b) ≥ 18	Refugee Repeat Users <18	Refugee Repeat Users ≥ 18	Refugee Discontinued (c) <18	Refugee Discontinued (c) ≥ 18	Cumulative number at end of period (a + b - c)	Quantity of each method distributed during period*	units
COCP* - low dose *(Micro-gynon; Nordette)*										cycles
COCP* - high dose *(Lo-femenal)*										cycles
POP** *(Micro-val; Micro-lut)*										doses
ECP*** *(Postinor-2)*										doses
Injectable *(Depo-Provera)*										doses (ml)
Implantable *(Norplant)*										implants
Intra-Uterine Device (IUD)										IUDs
Condom (Male)										pieces
Condom (Female)										pieces
Sterilisation (Male)										sterilisations
Sterilisation (Female)										sterilisations
Other										

* include methods given to all types of users