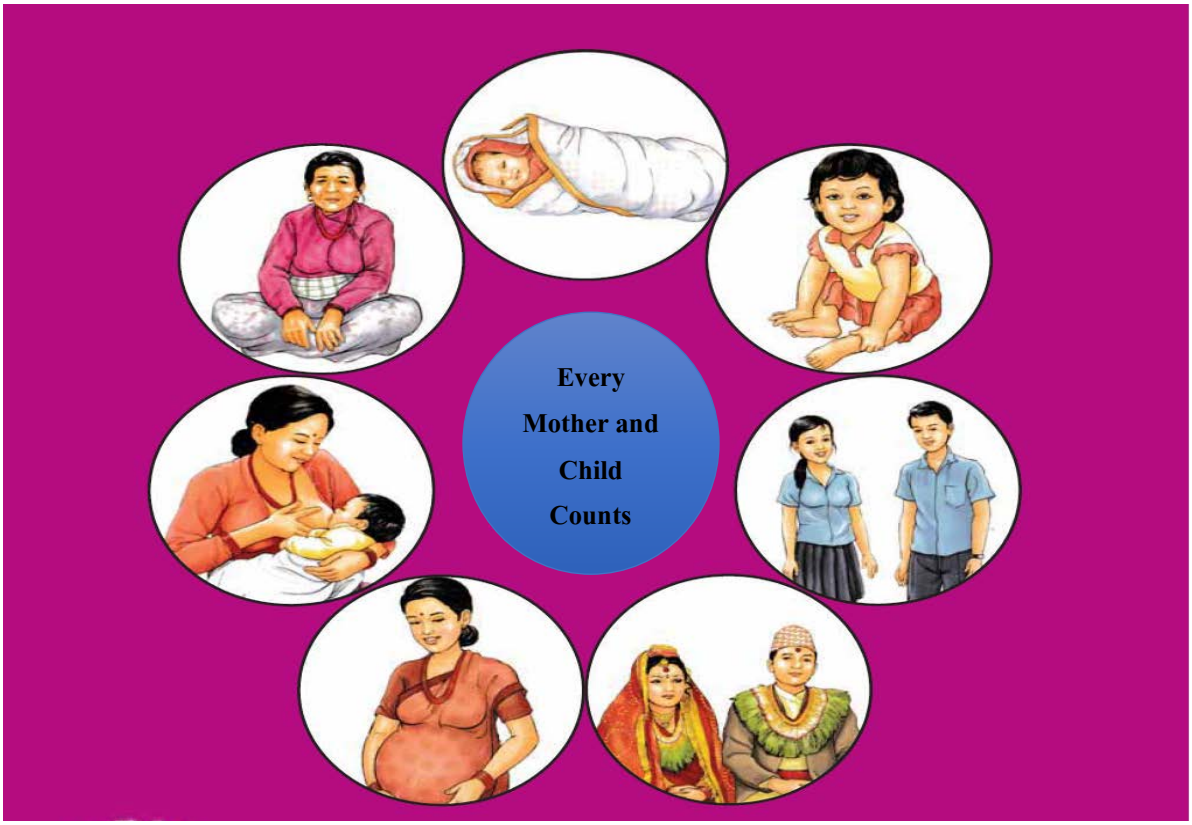
Maternal and Perinatal Death Surveillance and Response

Program Guidance Document

2079

(2021-2022)



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Contents

Maternal and Perinatal Death Surveillance and Response

1. Introduction

1.1 Background

The Constitution of Nepal 2072 B.S has established Basic Health Care as a fundamental right. The Right to Safe Maternal and Reproductive Health Act 2075 and the Public Health Act 2075 aim to provide free basic health care services for reproductive health and safe maternity and newborn health. The Government of Nepal has given great importance to the rights and entitlements provided by the Constitution and the Act that women should not be allowed to die during childbirth. To reduce maternal, neonatal, and perinatal deaths through various efforts related to safe motherhood the Government of Nepal, Ministry of Health and Population has launched the MPDSR program.

The socio-economic status of any society and nation is reflected by the health condition of its women and children. The happiness and prosperity of the family originates from the health of the woman and is reflected in the smile of the children. But even the natural reproductive process sometimes can unintentionally lead to extremely bad and tragic situations.

The World Health Organization estimates that each year 130 million babies are born worldwide and 38 out of every 1,000 live births die before the age of five. In addition, 4 million children worldwide die before they reach one year of age (WHO, 2019). In 2019, about 2.4 million babies died within one month of birth. Among them, about three-quarters (1.8 million) of the babies died within seven days of birth and 2 million babies were stillborn (UNICEF, 2019). Of these, one-third of infant deaths could be easily saved. Similarly, worldwide out of 4 million perinatal deaths, about 98 percent of deaths occur in less developed countries like Nepal (Global burden of Disease Study, 2015). Although progress has been made in reducing maternal, neonatal, and perinatal deaths through numerous efforts related to safe motherhood, a lot more needs to be done especially in the less developed countries (WHO 2015).

The death of a mother adversely affects the health and growth of her child and affects the health of the family as well. Poor maternal health, lack of proper care during pregnancy, improper management of pregnancy and childbirth complications, lack of care within the first hour of delivery and lack of proper care of the newborn can lead to stillbirth and neonatal death. In some cases, cultural beliefs and risky behaviors can also affect the health condition of a child (WHO 2006).

In most of the less developed countries, maternal mortality is the leading cause of death for women of childbearing age. According to 2017 statistics, an estimated 808 women worldwide die every day due to pregnancy or pregnancy-related complications. Of these, women in less developed countries are 130 times more likely to die as compared to those in developed countries (WHO, 2017). The global figures in the report are estimated to be around 30 percent less than the true figure. In some countries, the estimate is almost 70 percent less

than the true figure. Most of these deaths can be prevented if proper preventive measures are taken and appropriate care is provided (UNICEF 2012).

Maternal mortality in Nepal has dropped significantly from 539 per million live births (NFHS) in 1996 to 259 per million live births in 2016. Similarly, the under-five mortality rate has come down from 139 in 1996 to 39 in 2016. The infant mortality rate has also dropped from 93 in 1996 to 32 in 2016. The infant mortality rate of newborns within one month of birth, has dropped from 58 in 1996 to 21 in 2016. The perinatal mortality rate has dropped from 45 in 2006 to 31 in 2016 (NDHS 2016).

Improving maternal health is the certain way to reduce maternal mortality in the country, and it also contributes greatly to the progress made in the survival of infants and children. The regular incentives provided by the government, including free maternity services and financial assistance to cover transportation costs, have doubled the number of deliveries at health facilities over the past five years (up from 18 percent in 2006 to 57 percent in 2016 (NDHS 2016).

Therefore, in addition to maternal mortality statistics, it is very important to get information on what can be done better to reduce maternal mortality. Facility and community-based maternal mortality reviews have been a good source of information in the past. In any case, the production and collection of information in this field is the need of today. This guideline on Maternal and Perinatal Death Surveillance and Response will help identify potential causes of maternal mortality in health facilities and community and perinatal mortality in health facilities and improve the quality of service in the future. This process will also help the health sector and the community realize the necessary actions to make a significant progress in health outcomes.

1.2 Past Efforts

Several notable efforts have been made since 1990 to review maternal and perinatal mortality.

Year	Efforts Made
1990	The Family Health Division (FHD), with technical assistance from World Health Organisation (WHO) started the Maternal Mortality Review at Paropakar Maternity Hospital
1996/97	Maternal Mortality Study done in Kailali, Okhandhunga and Rupandehi as part of Maternal Mortality Review
2002/03	Training on Maternal Death Review provided to doctors and nurses in public hospitals in collaboration with NSMP,UNICEF, NESOG

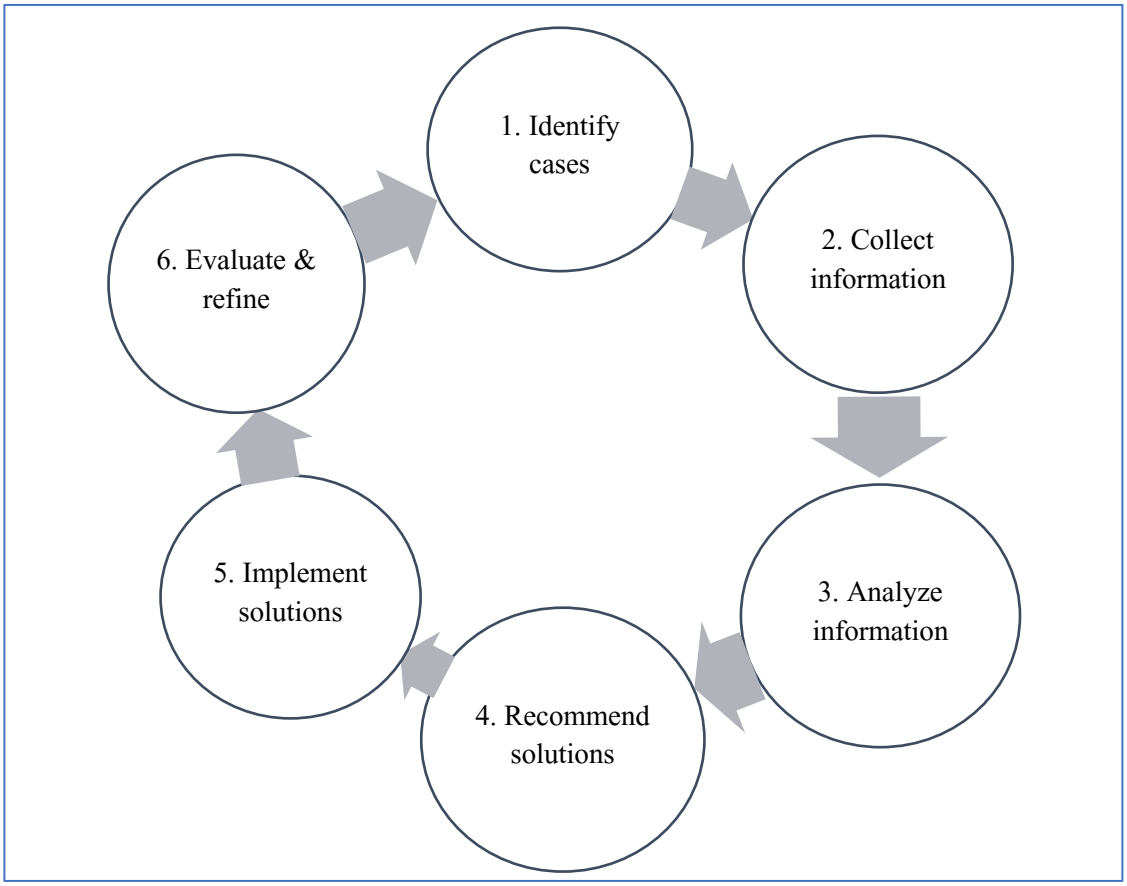
2003	FHD in collaboration with WHO developed the guideline on Maternal Death Review, revised the maternal death review process and launched the Perinatal Death Review
2006	The national Maternal and Perinatal Death Review committee implemented the Maternal and Perinatal Death Review Program (MPDR) in six hospitals across the country
2008/09	With support from SSMP, the second Maternal Morbidity and Mortality Study was conducted, and the Maternal and Perinatal Review forms were revised
2011/12	The FHD expanded the MPDR program in five more hospitals to implement in a total of 21 hospitals
2013	MPDR program expanded to 42 hospitals, and FHD (now Family Welfare Division-FWD) revised the Maternal and Perinatal Death Review forms revised
2015-18	The Family Welfare Division (FWD) issued the Maternal and Perinatal Death Surveillance and Response (MPDSR) guideline 2015, and expanded the MPDSR program in 77 hospitals and started the community Maternal Death Surveillance and Response Program (MDSR) program in 11 districts
2020	MPDSR program implemented in 77 hospitals and 12 districts

1.3 Maternal and Perinatal Death Surveillance and Response (MPDSR)

Maternal and Perinatal Death Surveillance and Response (MPDSR) is a routine monitoring process that integrates the Health Information Systems and quality improvement processes from the local level to the national level. This includes measures and reasons to reduce maternal and perinatal deaths, identification of cases on a regular basis, reporting, counting as well as using the information obtained to avert preventable deaths in the future. Monitoring is seen as a good tool for improving public health programs, planning, implementation, and evaluation. Reducing every maternal and perinatal death that can be prevented is the main goal of MPDSR.

In Maternal and Perinatal Death Surveillance and Response, the term "RESPONSE" emphasizes the implementation aspect of monitoring. The information on each maternal and perinatal death helps to measure maternal mortality ratio and perinatal mortality rate and also helps to identify the timeliness which in turn measures the effectiveness of the program. The effectiveness of the MPDSR program is based on the information on successful implementation as well as the quality of both Maternal Death Review (MDR) and Perinatal Death Review (PDR).

Figure 1: Maternal and Perinatal Death Surveillance and Response Cycle



1.4 Maternal and Perinatal Death Surveillance and Response Program Rationale

Global Situation

MPDSR is based on key elements of the Commission on Information and Accountability (CoIA) and the United Nations Global Strategy on Women and Children's Health. One of the main objectives of CoIA is to get accurate information for better results. It has suggested to organize the health system in such a way that the data obtained from the health institution and the survey data can be used effectively.

The United Nations Commission on the Status of Women has targeted universal access to family planning, skilled obstetricians, basic and comprehensive emergency obstetric services to reduce maternal and perinatal mortality and morbidity.

Maternal and perinatal death review systems based in health institutions are a qualitative method of conducting in-depth research into the causes and conditions leading to maternal and perinatal deaths in institutions. Community-based maternal death review system (verbal autopsy) is a method of detecting individual, family, or community-related causes and factors related to death. The MPDSR is an extension of the Maternal Death Review and Perinatal Death Review, which collects data on maternal and perinatal deaths. It emphasizes the need

for support from stakeholders in identifying vulnerabilities in delivering healthcare using information obtained from such data.

Rationale for implementing MPDSR in Nepal

Globally, Nepal has also won international awards for its contribution to improving maternal and child health by reducing maternal and child deaths, which was high in line with the Millennium Development Goals. Institutionalizing this achievement in the coming days and fulfilling the goals that Nepal has committed to sustainable development has become a major challenge in view of the changed structure of the country. According to the Sustainable Development Goals, by 2030, the maternal mortality ratio must be reduced to 70 (per 100,000 live births), preventable infant mortality to 12 (per 1,000 live births) and child mortality to 25 (per 1,000 live births). According to the World Health Organization's Count Every Death Strategy, Nepal can achieve the Sustainable Development Goals only by identifying and reviewing every death and conducting appropriate activities to prevent similar deaths in future.

Principles of MPDSR:

A. No woman should lose her life in childbirth.
B. Every death must be counted.
C. Maternal death should not be limited to the number only.
D. The result of this process will not have legal implications.
E. No one will be blamed in this process.
F. No one's name will be revealed in this process.
Is. No one will be punished based on the results of this process.
H. This process explores the underlying cause of death.
H. Every death teaches a lesson.

*Note: The above-mentioned principles should be followed in every MPDSR committee meeting.

1.5 Use of this guideline:

This guideline has been liberally adapted from the World Health Organization's "Maternal and Perinatal Death Surveillance and Response: Materials to Support Implementation", 2021. To include contemporary issues related to maternal and perinatal deaths, this guideline has been revised to be used by all healthcare workers, healthcare planners, managers, and policy makers.

1.6 Goals and Objectives:

Goals:

To direct public health activities and monitor their impact to prevent maternal and perinatal deaths that are preventable and to enhance the quality of health care by obtaining necessary information on maternal and perinatal deaths from the health facilities and the community.

Objectives:

1. To identify maternal and perinatal deaths in the health facilities and communities and to collect accurate data on causes of death and services.
2. To analyze the demographic and social aspects of maternal and perinatal deaths by continuously monitoring the maternal and perinatal mortality rate and identifying the risk groups.
3. To identify the activities required to reduce maternal and perinatal deaths and provide recommendations for implementation.
4. To inform the stakeholders about maternal and perinatal deaths and to increase accountability by raising awareness in the community.
5. To monitor the implementation of the recommendations given by the program and to ensure that the activities are being carried out by mobilizing the available resources properly.
6. To assist in the Civil Registration and Vital Statistics (CRVS) system by improving the data related to maternal and perinatal deaths.
7. To give priority and support to the research work related to maternal and perinatal deaths.

1.7 Maternal and perinatal Death Surveillance and Response Summary

MPDSR is a continuous surveillance process that provides accurate, timely, quality and usable data on the causes of maternal and perinatal deaths and the factors contributing to those causes. The response is to formulate and implement an appropriate and effective plan based on the data obtained from the surveillance process. Its main objective is to identify all maternal deaths in health facilities and community and all perinatal deaths in health facilities, inform the relevant bodies and review to take effective steps to reduce such deaths in future. The main steps are as follows.

1.7.1: Notification:

The death of a woman aged 12-55 years in the community due to any cause has to be notified by the Female Community Health Volunteers (FCHVs) to the nearest health facility, within 24 hours of the death or knowledge of death.

The maternal death in the health facility should be identified immediately and the MPDSR committee at the health facility should be notified immediately. The health facility should

notify the concerned local level health department within 24 hours of death or knowledge of death.
Similarly, if a maternal death occurs at home or on the road, it should be reported to the local level health facility which will in turn notify the local level health department within 24 hours of the death being reported.

1.7.2: Screening:

The health facility should immediately identify any maternal death in the health facility and inform the concerned local level health department within 24 hours of death or knowledge of death.
Similarly, maternal death at home or on the road, should be reported to the local level health facility which in turn should notify the local level health department within 24 hours of the death being reported. To confirm whether the reported death is a probable maternal death, the nursing staff from the health facility should visit the deceased woman's home and fill out a screening form to determine if the reported death is a probable maternal death. There are four questions in the screening form. If the answer to ANY ONE of the four questions is "YES", then it could be a maternal death. After filling in the form and making sure that it is a probable maternal death, a team from the local level should be sent for Verbal Autopsy.

1.7.3: Conduct Verbal Autopsy (VA) and identify the cause of death:

Verbal Autopsy should be done by the local level health department within 30 days of receiving the information of probable maternal death from the community level health facility. After VA, the cause of death should be assigned by the trained physician available at local level / health facility.

1.7.4: Maternal and Perinatal Death Review:

The Local Level Maternal Death Review Committee should immediately identify the possible medical and other (non-medical) causes of maternal death, evaluate the solution to those causes, identify the necessary actions and implement them in the community to prevent similar deaths in future.
Similarly, the Maternal and Perinatal Death Review Committee at health facility should conduct an evidence-based review of all maternal and perinatal deaths in the health facility. After the review, online reporting of maternal deaths that occurred in the community and maternal and perinatal deaths that occurred in the health facilities should be done. The information should be shared with the Health Office, Province Health Directorate and Family Welfare Division to move towards minimizing such deaths in future.

1.7.5: Analysis and Interpretation of results

Necessary actions should be taken based on priority after analyzing and interpreting the data obtained by reviewing each maternal death and summary of perinatal death once a month, at the local level / health facility level. The data must then be entered in the MPDSR web-based system along with the action plans. In addition, the local level, the province, and the federal level should analyze and interpret the data obtained from the online system and formulate the possible action plans based on priority.

1.7.6: Response and Monitoring

Based on the recommendations of the MPDSR committee and the results obtained from the analysis of the information, appropriate response/actions should be identified and implemented. Response activities may be targeted at a single community or health facility and may also be related towards inter-sectoral and multi-sectoral stakeholders. To ensure that the response is implemented as per the plan, continuous monitoring should be done. Monitoring and evaluation of this program is an ongoing process at every level and is important to ensure the implementation of the recommendations/actions as well as for the quality of the program and the completeness of the information.

Figure 2: Maternal Death Surveillance and Response Summary

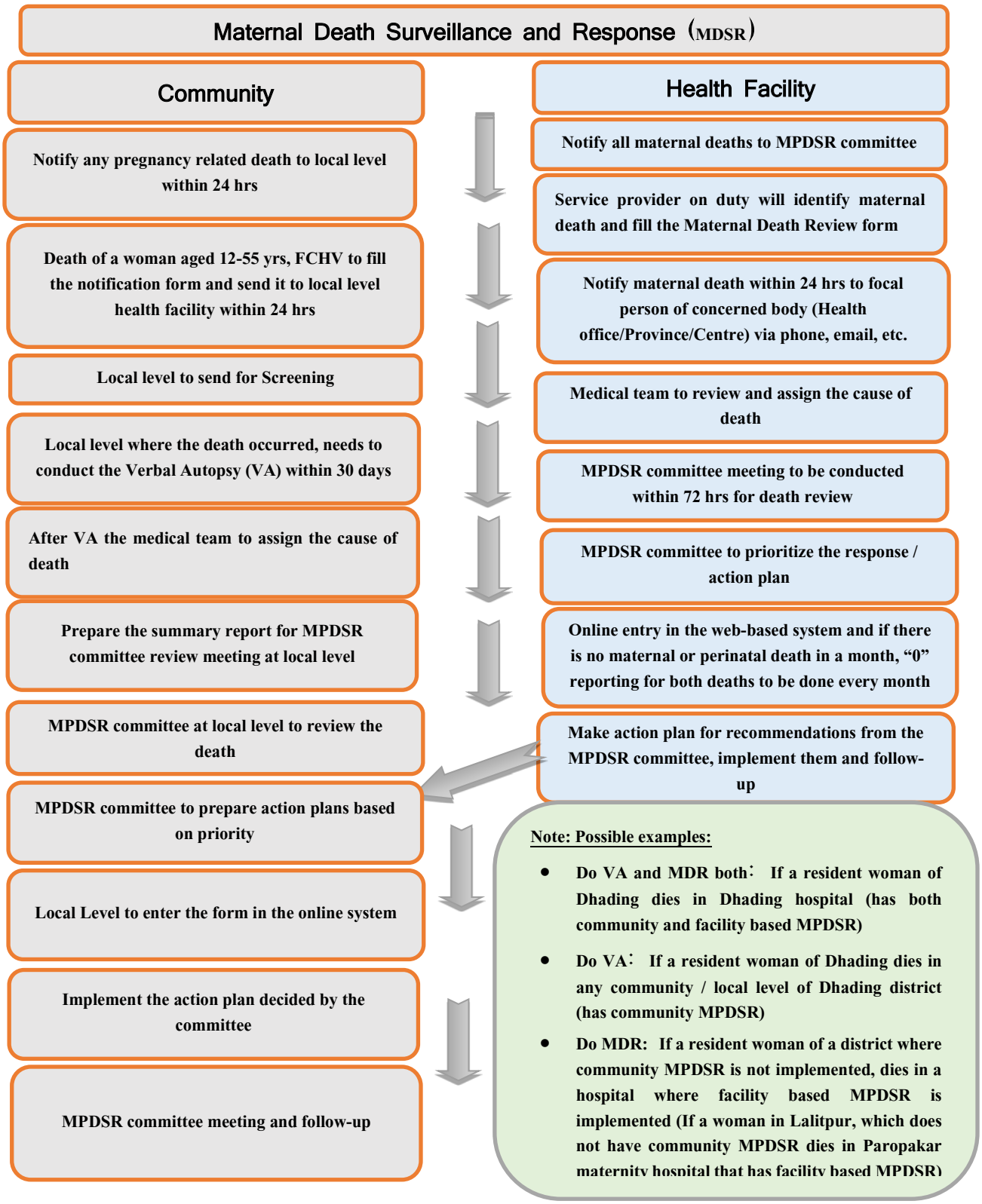
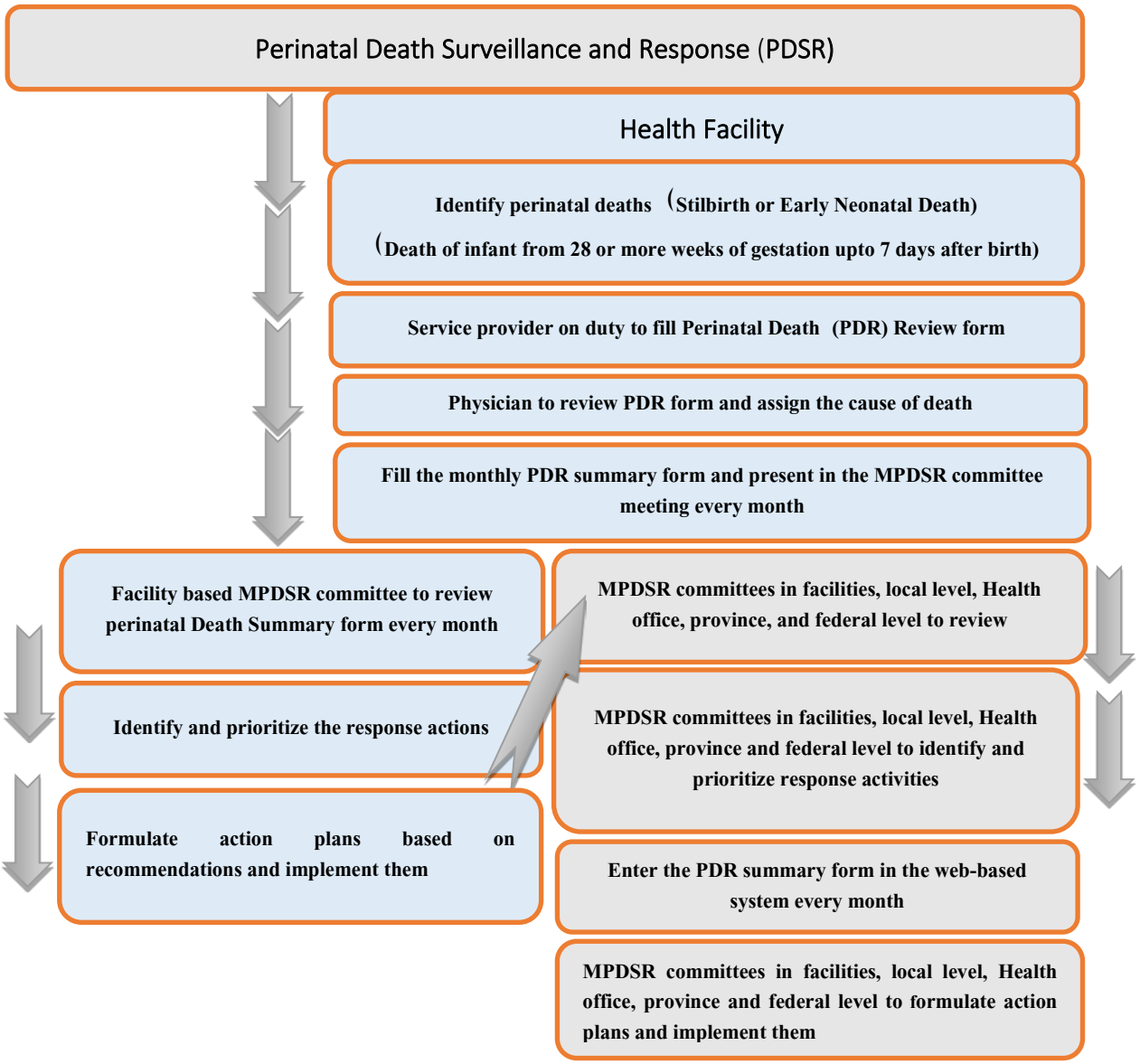


Figure 3: Perinatal Death Surveillance and Response Summary



After the above work is completed at the health facility, community and local level, the process of review and response is done in the health office, province, and center respectively. The health office, the province and the center should provide necessary assistance and facilitation to the health facility and local level on issues that could not be resolved by analyzing the information obtained from the health facility and local level.

2. MPDSR program implementation at Community level

Maternal death surveillance and response begins at the community level, but perinatal deaths are reviewed and responded only at the health facility level. MPDSR programs at the local level should be conducted according to the following steps.

2.1 Notification at Local level:

Death of a woman aged 12-55 years in the community, due to any cause, should be notified to the nearest health facility at local level by Female Community Health Volunteer (FCHV), within 24 hours of death or knowledge of death.

The main person responsible for notification of maternal death in the community is the FCHV assigned to the particular local level. There may be other stakeholders who can be notifiers, eg: Ward representatives, teachers, social workers, religious leaders, and others.

For notification, MPDSR form no. 1 (Notification form) should be filled and submitted to the health facility of the concerned local level. The FCHVs can inform the head of the health facility in the ward concerned or the nursing staff working in the health facility by phone or by sending a message on the mobile or by sending a written notice, email or by other electronic means. In addition, the head of the health facility or the MPDSR focal person should contact the FCHVs during FCHV meetings and other service providers should also enquire about death of a woman aged 12-55 yrs in their communities during outreach or vaccination clinics. If any death is identified, then that death must be notified. Even if information is received later than the stipulated time, notification should be done. Local Level Health section/division should provide adequate forms to FCHVs.

2.2 Screening:

In the community, if a woman aged 12 and 55 years dies due to any reason, within 24 hours of receiving the death notice, a service provider goes to the house of the deceased woman and interviews the person concerned (the person most knowledgeable about the deceased woman) to identify whether the death is probable maternal death or not. This process is called screening. For screening of maternal deaths, the nursing staff from the concerned health facility at the local level should be sent to visit the house of the deceased woman to fill MPDSR Form No. 2 (Screening Form). The nursing staff will need to ask the following four questions to confirm whether it is a probable maternal death.

- Did she (deceased woman) die while pregnant?
- Did she (deceased woman) die during labour (childbirth)?
- Did she (deceased woman) die within 42 days of delivery?

- Did she (deceased woman) die during abortion or within 42 days of miscarriage or abortion?

If the answer to any ONE of the above Four questions is "YES" then the death may be maternal death. The death should be reported by the concerned nursing staff or the head of the health facility, to the health division/section at local level through the fastest means.

If the answer to all the questions is "NO" then there is no need for immediate notification to the health division/section at local level, but the head of the health facility MUST send the filled screening form (MPDSR form no. 2) along with the monthly report, to the concerned health division//section at local level. In case of health posts, the procedure mentioned above will be followed.

2.3 Verbal Autopsy (VA)

During screening from local level health facility, if the information obtained suggests that death could be a probable maternal death, then oral investigation will be conducted from local level health division/section, to obtain information on cause of death. This process is called Verbal Autopsy (VA). Verbal autopsy should be conducted within 30 days of death or information on death from the community, and the VA form (MPDSR form no. 3) should be filled. If due to late receipt of information or other reasons, VA could not be conducted within 30 days, then in that case the reason for the delay should be communicated and VA should be conducted at the earliest.

2.3.1 Responsibility for conducting Verbal Autopsy

The following staff should be deployed to conduct VA:

Local level health division/section head,

Supervisor and PHN / Nursing staff or other service provider or one of the service providers working in the local level health facility.

A maximum of two employees, a PHN / Nursing staff is mandatory, should be deployed from the local level health division/section. The team deployed to conduct VA should first contact the nursing staff working at the health facility in the ward where the maternal death occurred. After that, the staff assigned for screening should also be taken to the house of the deceased woman for VA.

2.3.2. Where should VA be done?

Verbal Autopsy interview should be conducted with the person closest to the deceased woman or with the person present at the time of death. VA should be done in the community where the woman died.

Eg:

- If there is death of a woman who is a resident of MPDSR implementing district:

  o If death occurs in the community / road of the same district: The local level should only conduct VA at the home of the deceased woman.

  o If death occurs in MPDSR implementing hospital: The hospital should fill the MDR form and conduct review and the local level should conduct VA at the home of the deceased woman.

  o If death occurs in MPDSR non-implementing hospital: Local level should only conduct VA at the home of the deceased woman.

- If there is death of a woman who is a resident of MPDSR non-implementing district:

  o If death occurs in another district where MPDSR is implemented (but is not the usual place of residence of the deceased woman): Not required to conduct VA of the deceased woman.

  o If death occurs in MPDSR implementing hospital: The hospital should only fill the MDR form and conduct review.

- If death of a woman occurs in a place that is not the usual place of residence of the deceased woman (usual place of residence- resided for 6 months or more), then VA should be conducted at the usual place of residence of the deceased woman.
- If death of a foreign woman (not a resident of Nepal) occurs in an MPDSR implementing hospital in Nepal, the hospital should fill the MDR form and conduct the review.
- If death of a woman who is a permanent resident of MPDSR implementing district in Nepal but her usual place of residence is another country, occurs in an MPDSR non-implementing district in Nepal, then in such cases the person conducting VA should use his/her judgement and conduct VA with the person and in the place from where maximum information can be obtained about the deceased woman. The main purpose of VA should be kept in mind and interview should be planned according to the situation.

The main purpose of VA is to conduct a detailed investigation into the community factors and other causes of death. Therefore, VA interview should be done with the person who knows the deceased woman closely and has a lot of information about her. Also, it should be done in the place where the deceased woman usually lived (at least 6 months).

While visiting the deceased woman's place to conduct VA (MPDSR Form No. 3) the details of the woman's house: latitude, longitude and elevation should be obtained with the help of GPS (Global Positioning System) as far as possible. It should be specified in the VA form (MPDSR form no. 3). Doing so helps to map the deceased woman's house. Also, in the VA form, the phone number of the person who was interviewed or any person close to the family,

should be mentioned. After the VA is completed, the VA team should submit the completed form to the MPDSR focal person at the local level.

2.4 Cause of death assignment

After the completion of VA interview, the MPDSR focal person has to determine who will assign the cause of maternal death. To assign the cause of maternal death, one doctor should be selected based on the following priorities:

1. Physician trained in cause of death assignment, working in the concerned local level health facility
2. Physician trained in cause of death assignment, working in any health facility of the concerned district
3. Obstetrician and Gynaecologist working in the concerned district
4. Medical officer working in any health facility in the concerned local level
5. Medical officer working in any health facility in the concerned district
6. Medical officer working in a private health facility in the concerned district

2.5 Formation of MPDSR committee at Local level and its functions, duties and rights

Once the MPDSR program is implemented, the MPDSR committees have to be formed. At the local level the MPDSR committees are formed at two levels.
(1) at the health facility level (community level) and (2) at the local level.

2.5.1 Formation of MPDSR committee at Local level health facility

1. Chairperson of the Health Institution Operation and
2. Management Committee - Chairperson
3. FCHV Representative (of the ward where the health facility is located) 1 Member - Member*
4. Principal of the local school or a representative appointed by him/her (of the ward where the health facility is located) 1 Member - Member*
5. Head of Health Facility - Member
6. Staff Nurse, Midwife or A.N.M. of the health facility, 1 Member - Member Secretary

Invitee members

7. Local level health division / section head or representative appointed by him/her - 1 person
8. Representatives of organizations working in reproductive health at the community level - 1 person

* Nominated by the MPDSR Committee

2.5.2 Functions, duties and rights of the MPDSR committee at the Local level health facility

1. To ensure notification of every death of women aged 12-55 year that occur in the community.
2. To review probable maternal deaths and coordinate with the local level for VA.
3. To collate the information received from the review and provide necessary support to the MPDSR committee of the health facility and the district.
4. To implement the recommendations received to prevent maternal deaths.
5. To mobilize resources to implement the recommendations.
6. Follow up on recommendations for implementation.
7. To spread awareness in the community about the causes of maternal death and prevention measures.
8. To give necessary advice and recommendations to the local level regarding the problems identified during the maternal death review.
9. If there is no maternal death, the MPDSR committee at the local level health facility should meet quarterly to discuss the previous action plans and their progress.

2.5.3 Formation of MPDSR committee at Local level

To implement the MPDSR program at the local level (rural/urban municipality, sub-metropolitan and metropolitan), the health coordinator will have to designate the person looking after safe motherhood program as the focal person for MPDSR. The focal person will play a key role in implementing the MPDSR program at the local level. After the implementation of the program, the following committees should be formed at the local level.

A) Municipality / Rural Municipality Committee

1. Deputy Mayor / Vice Chair-person - Chairperson
2. Chief Administrative officer - Member
3. Concerned Municipality / Rural Municipality ward chair-person - Member
4. Women & children's section representative - Member
5. Health section chief - Member
6. Physician (for cause of death assignment) - Member
7. PHN or Nursing staff working at local level - Member secretary

Invitee members:

8. Health Office representative - Member
9. Representative of the health facility where maternal death occurred - Member

B) Metropolitan / Sub-metropolitan Committee

1. Deputy mayor - Chairperson
2. Chief Administrative officer - Member
3. Health Division chief - Member
4. Women & Children's section representative - Member
5. Private hospital representative - Member
6. Physician (for cause of death assignment) - member
7. PHN / Nursing staff - Member secretary

Invitee members:

8. Health Office representative - Member
9. Representative of the health facility where maternal death occurred - Member
10. Representative from the organisation working in RH - Member

2.5.4 Functions, duties and rights of the MPDSR committee at Local level

1. To implement the MPDSR program at the local level.
2. To review maternal deaths at the local level.
3. To discuss on what could have been done at the local level to prevent maternal death.
4. To instruct the local level health facilities on what actions could be taken at the local level to prevent maternal deaths in the future.
5. To mobilize additional resources from the program and the local level and decide what response actions need to be taken.
6. To follow up on the response actions recommended in the past, whether they have been carried out or not and provide necessary support.
7. To direct the committee at health facility to carry out necessary programs to prevent maternal deaths and to mobilize resources.
8. To provide support to the concerned health facility for quality health services.
9. To coordinate with education, women and children, transportation, infrastructure
10. development, communication, police army, etc. for multi-sectoral response on maternal death.
11. To advocate for inclusion of MPDSR activities in local level review and planning programs.
12. To review whether the recommendations from previous MPDSR committee

meetings have been implemented.

13. To ensure maternal death reporting from local level and health facilities.
14. To facilitate the use of the budget allocated for MPDSR at local level and health facility level.
15. If there is no maternal death, the local level MPDSR committee should meet quarterly to discuss the previous action plans and their progress.

2.6 Maternal Death Response at Local level

In case of maternal death in the community, after conducting VA, the MPDSR committee at local level should meet for review. The current situation should be reviewed, and the cause of death should be identified in three delay model. The community health facility should focus more on the first and second delays, and the Birthing Centers should focus more on the third delay also and prepare the necessary response / action plan.

Short Term Response:

- Present and discuss the issues of maternal death in appropriate groups or with stakeholders / partners like: Health mother's group.
- Ensure the quality of services provided during pregnancy, delivery, and postpartum periods (including Lab tests).
- Make arrangement to operate various types of funds in case of emergency such as: Female Community Health Volunteer's (FCHV) fund, EOC fund, referral fund or any other fund.
- Take initiative to improve the referral system.
- Raise public awareness in the community regarding the factors that increase the risk of maternal death.
- Manage the working hours of the service providers and arrange the opening hours of the health facilities and arrange for accommodation in the maternity centers.
- Make arrangement to ensure adequate supply of essential medicines and equipment in the health facilities and ensure the availability of a minimum (buffer) stock of emergency medicines in the maternity centers.
- Make necessary arrangements for infection prevention and ensure that health services are provided in accordance with the prescribed criteria.

Mid Term Response:

- In the review meetings of FCHVs, discuss the achievements on maternal deaths and spread the necessary public awareness.
- In the review meetings of the health facilities, discuss on the findings obtained from the maternal death review and formulate appropriate action plans.

- ❖ Implement the recommendations received from the health office, Province and Centre.
- ❖ Conduct various health promotion activities such as: training, street drama, cultural programs in local language.

Long Term Response:

- ❖ Present the facts or information obtained from the Maternal Death Review to the civil society, reputed persons or bodies that can have an impact on maternal death.
- ❖ Advocate on the issue of maternal death in the village and city councils and facilitates the implementation of activities from the councils.
- ❖ Include MPDSR in the annual programs, reviews, and reports at the local level.
- ❖ Prepare annual budget and plan based on the data obtained.
- ❖ Increase the capacity of service providers.

2.7 Online entry at Local level

Health Division / section chief or Statistics officer must enter the following forms in the MPDSR Web Based System: Notification Form, Screening Form, VA Form, Maternal Death Cause of Death Assignment Form and Action Plans. After online entry, the hard copies of all the forms should be kept safely at the local level. Contact the MPDSR Focal Point (Family Welfare Division) at the center for the Username and password, that are required for online entry. Detailed information on online entry is available in the web-based guideline.

2.8 Data Analysis at Local level

At the local level, reports can be generated online from the data that has been entered. The report can help to identify what needs to be done for to make improvements at the local level. The MPDSR focal person at the local level can identify the program shortcoming from the report and provide recommendations for improvement in the future. The local level can also identify the status of various indicators based on the number of maternal deaths in its health facilities, identify and analyze the causes of death and present it in the stakeholders' forum. The facts that need to be analyzed and presented are as follows:

- ❖ Generate explanatory tables, charts, and graphs on maternal and perinatal deaths on a monthly / quarterly / annual basis.
- ❖ Identify the numerator and denominator of the indicators.
- ❖ Explain the trend of indicators and their current status.
- ❖ Submit the report to MPDSR committee at local level.

2.9 Monitoring and Follow-up at Local level

At the local level, the MPDSR focal person should monitor and follow-up to ensure that the immediate, periodic, and annual responses recommended by the committee are being implemented and should report to the committee.

3. MPDSR program implementation at District level (Health Office)

The main responsibility of Health office at District level will be to provide technical assistance, coordination and monitoring to the MPDSR program at local level and in the health facilities under its jurisdiction.

The Health Office will have to conduct MPDSR program in the following stages:

3.1 Coordination from District MPDSR committee (Health Office) in implementing MPDSR program at Local level

In case of death of a woman aged 12 to 55 years at the community, the health office should coordinate with the local level and provide technical support to ensure that FCHVs notify the death to the concerned health facility, following which screening should be done by health worker and VA conducted from local level. The health office also needs to assist the local level in ensuring that all concerned local levels have informed the deaths of women aged 12-55 years, screened those cases, conducted VA and reviewed and responded to maternal deaths. To determine the cause of maternal death at the local level, a trained physician is required. However, since in most of the local levels, trained doctors are not available, the health office should coordinate to identify trained doctors within the district to assign the cause of death at the local level. In addition, if there are no trained physicians (not even ONE) available in the districts where the program has been implemented, the health office should coordinate with the province and central level to provide cause of death assignment training to a physician working in the district, where the MPDSR program has been implemented.

3.2 Coordination from District MPDSR committee (Health Office) in implementing MPDSR program at Health facilities

The Health Office should provide technical assistance to all public and private health facilities implementing MPDSR program. At the health facility level, the focal person from health office should participate in MPDSR committee meetings and play a coordinating role to connect health facilities, local levels and province.

If there is a maternal death in a health facility in the district where health office is situated, then that information should be communicated by the health office to the local level for VA.

3.3 Formation of MPDSR Committee in District (Health Office) and its functions, duties and rights

At the district level, the MPDSR Committee should be formed as follows:

A. District Coordination Committee, Head - Chairperson
B. Focal person from District Coordination Committee - Member
C. P.H.N. or Safe Motherhood focal person - Member
D. Physician working in government or private hospital * - Member
E. Health Office / Health Service Office, Head - Member Secretary

Invitee Members:

F. Reproductive Health Coordinating Committee, 1 member - Member

* To be selected by the committee

3.4 Functions, duties and rights of the MPDSR committee at District (Health Office)

A. To facilitate VA and review of maternal deaths at local level in the district
B. To facilitate the local level in conducting capacity building activities
C. To facilitate data management
D. To facilitate MPDSR planning
E. To manage and monitor the resources
F. To support the concerned local level to provide quality health services
G. To coordinate with stakeholders.
H. To implement issues that cannot be resolved at the local level and need to be facilitated at the district level (such as referral mechanism, inter-agency coordination, onsite coaching).
I. To assist health facilities in reviewing maternal and perinatal deaths, receiving recommendations, and implementing them.
J. To advocate for reduction of maternal and perinatal death.

3.5 Data Analysis and management at District (Health Office)

The PHN and the Statistics Officer / Assistant at the Health Office should monitor to ensure that all the data entered in the web-based system, by the health facilities and local levels under the jurisdiction of the district, are complete and accurate. If it is found that the data have not been entered from any local level or health facility, the health office should request them to enter the data as well as provide necessary support.

The data obtained online should be analyzed by the Statistics Officer and the Public Health Nurse. Status of maternal and perinatal deaths, causes of death, three delays, efforts to reduce mortality, and mitigation measures to prevent deaths in the future should be analyzed

and presented in the health office review meetings, stakeholder's meetings and planning meetings.

In the health office, the public health nurse should analyze the status of the program and form a committee as specified in the guideline. The health office should also prepare the issues and action plans prepared by the health facilities and local level to prevent future deaths and facilitate in taking necessary decisions from the committee.

3.6 Maternal Death Response at District (Health Office)

Short Term Response:

- Discuss the three delays and help to decide the strategies.
- Coordinate with various stakeholders for technical and financial assistance and assistance for equipment.
- Provide necessary support to the MPDSR committee at the local level.
- Provide necessary assistance to the MPDSR committee at the health facility and assist in distribution of budget.
- Assist in conducting other activities as required.

Mid Term Response:

- Present the information obtained from the review to various groups and stakeholders such as: Reproductive Health Coordinating Committee and other review meetings.
- Monitor and supervise the health facilities / maternity centers.
- Discuss the findings from the death review meetings and formulate necessary action plans.
- Implement the recommendations and feedback received from the higher-level bodies.
- Include necessary programs for prevention of maternal and perinatal deaths in periodic plans.
- Conduct various promotional activities in the community in local language, as much as possible: training, street drama, local cultural programs, etc.

Long Term Response:

- Present the information and issues of maternal and perinatal deaths in the review meetings at local level, health office and province level.
- Plan and implement programs in collaboration with Health Office Coordination Committee and other stakeholders as required.
- Conduct facilitation and monitoring activities as required.

4. MPDSR program implementation at Health facilities

In the health facilities where the MPDSR program has been implemented, the program should be conducted according to the following steps:

4.1 Maternal death notification in Health facilities and filling the forms

In case of maternal death in the health facility, the on-duty physician or nursing staff should fill up the MPDSR form number 4 (MDR form) within 24 hours of death. The maternity ward incharge or the medical superintendent/hospital director should be notified to conduct the MPDSR committee review meeting within 72 hours of death. In the case of perinatal death, the on-duty physician or nursing staff must complete the PDR form (form number 5) within 72 hours of death.

In case of maternal death, if the deceased woman resides in the district where the hospital is located, the health office in the concerned district or the local level should be notified within 24 hours of death. If the deceased woman is from another district, the health office of the concerned district or local level should be notified within 24 hours of death.

After receiving the information, the local level should be asked to inform the FCHV to notify the death from the community and the process of VA should be taken forward.

4.2 Maternal death review in health facilities

In case of maternal death in the health facility, the facility level MPDSR committee should meet within 72 hours of death and in case of perinatal death, the committee should meet once a month. Both the meetings can be held at the same time, jointly. The committee should be formed to review maternal and perinatal deaths in the health facilities as follows.

4.3 Formation of MPDSR Committee in Health Facilities and its functions, duties and rights

Health facilities include all levels of government and community, private, teaching hospitals, non-governmental hospitals, mission hospitals, nursing homes, etc. After conducting a clinical audit of the death in the hospital, if the deceased woman is a resident of MPDSR implementing district, then for further detailed investigation, trained personnel from local level should visit the household of the deceased woman and conduct Verbal Autopsy.

According to the availability of various service providers working in the hospital, the MPDSR committee should be formed as follows:

<u>Health Facilities WITH different departments like Obstetrics and Gynecology, Pediatrics</u>

A. Chairperson of the Hospital Management Committee - Patron
B. Medical Superintendent / Hospital Director - Chairperson

C. Head of Gynecology and Obstetrics Department - Member
D. Head of Pediatrics Department - Member
E. Pediatric Ward / NICU Nursing In-Charge - Member
F. Nursing Incharge (Matron) - Member
G. Health section chief of the local level where the health facility is located (In case of private hospital / medical college) - Member
H. PHN / Safe Motherhood (SM) Focal Person from Health Office - Member
I. Medical Recorder - Member
J. Maternity Ward / Labor Room Nursing Incharge - Member Secretary
K. Invitee members *

<u>Health Facilities WITHOUT different departments like Obstetrics and Gynecology, Pediatrics</u>

A. Chairperson of the Hospital Management Committee - Patron
B. Medical Superintendent / Hospital Director - Chairperson
C. Obstetrician and Gynecologist / MD GP Physician - Member
D. Pediatrician - Member
E. Health section chief of the local level where the health facility is located (In case of private hospital - Member
F. PHN / Safe Motherhood (SM) focal person from Health Office - Member
G. Medical Recorder - Member
H. Head of Nursing (Matron) - Member Secretary
I. Invitee members *

* As specified by the committee, the following can be invited as invitee members as required in the committee meeting: MPDSR focal person from the province health directorate / local level health section, concerned personnel involved in the medical management of the deceased woman, doctors or nurses involved in the treatment of the deceased woman.

4.4 Functions, duties and rights of the MPDSR committee at Health facilities

A. To review maternal and perinatal deaths in health facilities.
B. To ensure that all maternal deaths have been notified and properly reviewed.
C. To ensure proper management of maternal and perinatal mortality data.
D. To provide necessary support to the health facility team by summarizing the results obtained.
E. To coordinate with the MPDSR committee at the province, district (health office) and local level as per the need based on the review.

F. To make action plans to implement the recommendations and mobilize the resources.

G. To follow up continuously to ensure implementation of action plan.

H. To present the facts and recommendations obtained from the review to the province, health office and central level.

I. To cooperate and coordinate with various stakeholders to enhance the quality of service in the health facilities.

J. To present the data and facts on MPDSR in annual reviews.

K. To review the MPDSR program in the annual and other review programs.

L. To make action plans following review, implement them, and follow up regularly.

M. To notify the concerned body about maternal death.

N. To review in each committee meeting, whether the recommendations from the previous meetings have been implemented.

O. To provide computers and laptops as required, to ease the online entry of information and prepare response plans and give the responsibility for improving the quality.

4.5 Process of conducting a Maternal death review in health facilities

The responsibility for conducting the maternal and perinatal death review committee meeting in the health facility will be of the Member Secretary or the person appointed by the Chairperson of the MPDSR Committee.

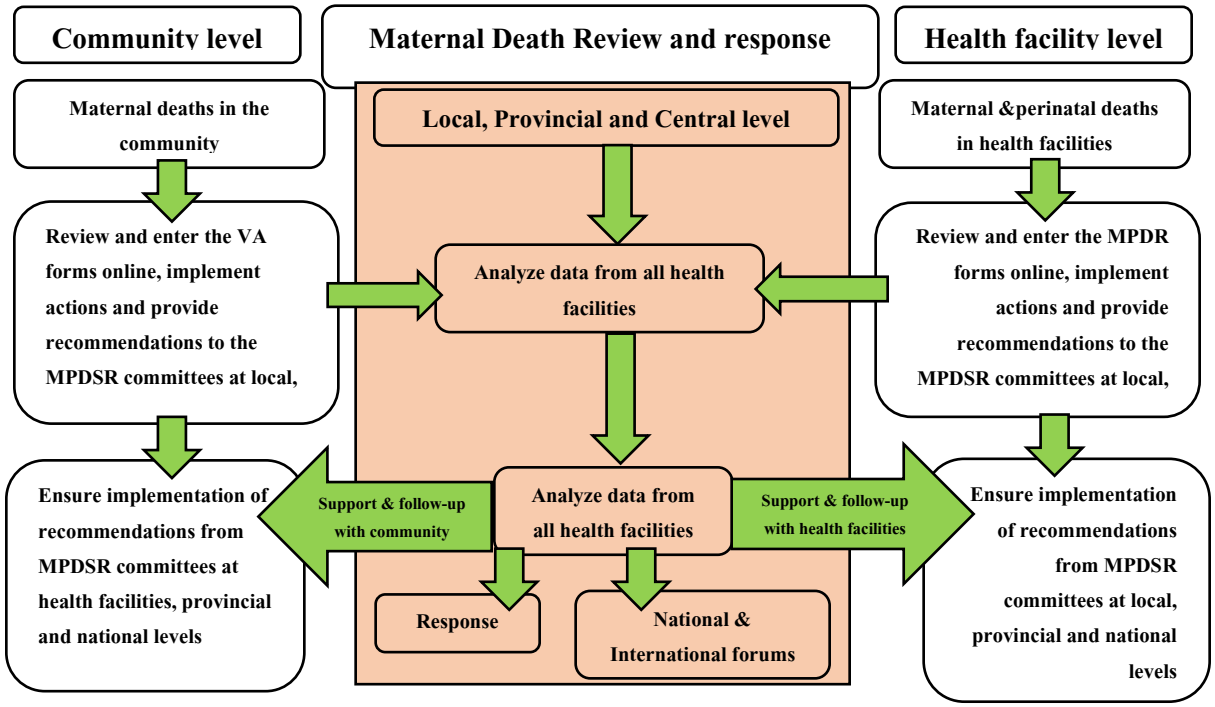
4.5.1 Maternal death review process in Health facilities

In case of maternal death in the health facility, the person responsible should convene a meeting within 72 hours of death. In each meeting, the person responsible should ensure that MPDSR Form number 4 (MDR form) is filled and discuss the details as mentioned in the form, make action plans and coordinate with the concerned stakeholders. After filling the maternal death review form, it should be reviewed by the committee and kept in the concerned health facility, while the details should be entered online in the web-based system. Also, the information regarding maternal death should be shared with the concerned health office or local level in the district where the deceased woman was a resident. It could be the district where the health facility is located or another district which was the place of residence of the deceased woman. If necessary, assistance should be provided to the local level MPDSR committee for maternal and perinatal death review, and necessary advice and recommendations should also be provided.

4.5.2 Perinatal death review process in Health facilities

In the case of perinatal death, for infants who have died at 28 weeks of gestation or later, or who have died within seven days of birth, the Member Secretary must convene a meeting on a specific day each month. Even if there are no deaths, meeting should be held each month. At each meeting, the Member Secretary should present the Maternal death review form (Form number 4) and perinatal death review summary form (form number 6). The details in the form should be discussed, actions planned and coordinated with the concerned stakeholders. The forms should be reviewed and kept in the concerned health facility. The Perinatal Death Summary Form should be entered online in the web-based system by the Medical Recorder.

Figure 4: Maternal and perinatal death review and response flow



4.6 Online data entry in Health Facilities

After the MPDSR committee meeting at health facility, arrangement should be made to enter the Maternal Death Review Form (MPDSR Form No. 4) and Perinatal Death Review Summary Form (MPDSR Form No. 6) in the online web-based system. The medical recorder is responsible for this task.

4.7 Data analysis in Health Facilities

After the MPDSR forms have been filled, they must be entered online in the software specified by Family Welfare Division. Health facilities should review and analyze the maternal and perinatal deaths. The data uploaded online by the health facilities can be downloaded

and report can be prepared from that data. The report can help the health facilities to identify gaps on what needs to be done. The staff at the health facility can
provide recommendations for improvement in the future, based on the issues identified in the report.

Based on the number of deaths at the health facility, they can identify the status of various indicators and assign the cause of death.

The hospital should analyze the following statistics on maternal and perinatal deaths on monthly / quarterly / annual basis and present them in the stakeholders' forum.

- ❖ Prepare explanatory tables, charts and graphs on maternal and perinatal deaths on a monthly / quarterly / annual basis.
- ❖ Identify the numerators and denominators of the indicators.
- ❖ Explain the current status and the trend of indicators.
- ❖ Submit the report to the MPDSR committee at the health facility.

4.8 Maternal and Perinatal death response in Health Facilities

The MPDSR committee at health facility should review any maternal death within 72 hours of death and perinatal death summary once in a month.

Short Term Response:

- Discuss the maternal and perinatal death issues in the MPDSR committee and staff meetings.
- Improve the quality of health care.
- Make arrangement to use the hospital funds in case of emergency and if there is no fund, arrange for the establishment of emergency fund.
- Make arrangement to be prepared to receive referred cases and prepare to refer cases only after initiating life- saving interventions.
- Raise public awareness in the community about factors that increase the risk of maternal death through Outreach clinic, outreach services and IPD services.
- Manage the duty time of service providers and arrange for regular opening hours of the health facility.
- Ensure adequate supply of necessary medicines and equipment in the health facility.
- Make necessary arrangement for infection prevention and ensure that health care is provided in accordance with the prescribed criteria.

Mid Term Response:

- Discuss the achievements of the maternal and perinatal death reviews in the periodic meetings of the health facility.
- Discuss the achievements of the reviews in the stakeholders' and partners' meetings.
- Implement programs for improvement, based on the feedback and

Recommendations received from the province and central levels.
- Include improvement works in the action plan of the health facility to prevent maternal and perinatal deaths.
- Carry out other tasks as required.

Long Term Response:
- Discuss the facts and information obtained from maternal and perinatal death review with government and other bodies.
- Advocate for the prevention of maternal and perinatal deaths.
- Make public the facts, issues and corrective actions related to maternal and perinatal death in various health related review meetings.
- Carry out other tasks as required.

4.9 Monitoring and follow-up in Health Facilities

The member secretary of the MPDSR committee is responsible for the following tasks:
- to ensure implementation of action plans as per recommendations
- to ensure whether expected outcomes have been achieved after implementing the changes
- to ensure whether correspondence and coordination has been done with other organisations /agencies on subjects that need to be coordinated.
- regular monitoring and follow up
- inform the medical superintendent / hospital director and review the progress during the meetings

5. MPDSR program implementation at Province level

The responsibility of conducting the MPDSR program at provinces will be with the Provincial Health Directorate (PHD). The Community Nursing Officer in the Health Directorate should act as the focal person for this program. At the province level, work should be done under the coordination and direction of the Ministry of Social Development.

5.1 Formation of MPDSR Committee at Province level

A. Province Health Director	- Chairperson
B. Head of Health Division, Ministry of Social Development	- Member
C. Statistics Officer	- Member
D. Province Hospital Head or Representative	- Member
E. Public Health Officer / Senior Public Health Officer	- Member

F. Gynecologist / M. D. GP. * - Member

G. Pediatrician * - Member

H. Community Nursing Officer / Administrator - Member Secretary

I. Invitee members can be appointed by the chairperson of the committee as required.

* Gynecologist and Pediatrician / M. D. GP should be doctors working in government health facilities as far as possible, if they are not available then they can be from private health facilities.

5.2 Functions, duties and rights of the MPDSR committee at Province level

To maintain uniformity in the review of maternal and perinatal deaths in health offices, local level and hospitals within the province, following should be done:

A. To decide the programs and budget for expansion and implementation of MPDSR program at the province.
B. To provide necessary resources to enhance the quality of health facilities and coordinate for necessary improvements.
C. To ensure the implementation of maternal and perinatal death review process at different levels of health facilities.
D. To provide training on MPDSR system and verbal autopsy to the health office, local level and health facilities as per the need and facilitate in assigning the cause of death.
E. To monitor and support the work of health office, health facilities and local level on a regular basis.
F. To monitor, evaluate, verify, approve and review the data entered online by local levels and health facilities, on a regular basis.
G. To review the verbal autopsies and recommendations in coordination with the local level, health facilities and health office.
H. To facilitate and coordinate the implementation of the recommendations provided by the local level and health facilities to reduce maternal and perinatal deaths.
I. To forward the recommendations received from the local level and health office to the central level for necessary assistance and policy reform.
J. To prepare annual action plan and report based on MPDSR data.

5.3 Response activities at Province level

The province government with approval of the MPDSR committee at the province should decide and implement the activities and budget as per the need to reduce maternal and perinatal deaths within the province.

To include these activities in the annual policy and program, the Health Directorate will have to send the plan of the programs to the Ministry of Social Development and coordinate with the health facilities, health offices and local levels to implement the programs. Necessary advice and recommendations regarding the activities related to this program that have to be conducted by the central level, should be provided by the province.

5.4 Data analysis and management at Province level

At the province level, the Community Nursing Officer and the Statistics Officer should regularly assess the completeness and quality of data, verify and approve the details entered online in the MPDSR web page from all the local levels and health facilities within their jurisdiction. Also, if it is found that the details of maternal and perinatal deaths have not been entered online from any local level or health facility, then the province level will also have to notify them for the online entry. In the review and planning meetings conducted at the province, the Statistics Officer and the Community Nursing Officer will have to make presentations on maternal and perinatal deaths, causes of death, three delays, actions taken to reduce deaths and activities to be done from the province level to prevent similar deaths in future. They are also responsible to conduct the review.

At the province, the Statistics Officer and the Community Nursing Officer should analyze the status of the program and form a committee as specified in the guideline. The issues from local levels and health facilities, the actions that must be taken from province level to prevent maternal and perinatal deaths should be decided and approved by the committee.

5.5 Monitoring, evaluation and follow-up at Province level

The province should monitor and follow up on the activities decided to be carried out by the central level, province, and local levels on a regular basis. Similarly, the local levels and the health facilities, should regularly monitoring and follow-up to ensure regular implementation of the program, regular and timely review of maternal and perinatal deaths and entry of accurate and complete data in the online web-based system.

6. MPDSR program implementation at Federal level

The secretariat of the MPDSR committee will be based in the Maternal and Newborn Health (MNH) Section under the Family Welfare Division (FWD) and will be responsible for conducting necessary activities for monitoring, review and response of maternal and perinatal deaths in the country.

6.1 Formation of MPDSR Committee at Federal level

1. Director General, Department of Health Services - Chairperson
2. Director, Family Welfare Division - Member
3. Health Management Information System, Section Chief, Management Division - Member
4. Chief of Child Health and Immunization Section - Member
5. NESOG Representative - Member
6. PESON or NEPAS Representative - Member
7. Quality, Standards and Regulation Division, Ministry of Health and Population Representative - Member
8. Representative of Private Health Institution Organization - Member
9. Chief of Maternal and Newborn Section - Member Secretary
10. Other invitee members *

* Will be as specified by the committee.

6.2 Functions, duties, and rights of the MPDSR committee at Federal level

A. To expand the MPDSR system and prepare action plans and programs for the same.
B. To conduct maternal and perinatal death monitoring and response activities in the country.
C. To monitor, supervise and follow up on implementation of MPDSR system on a regular basis.
D. To present the results and progress of MPDSR system to various agencies.
E. To identify health facilities and geographical areas where maternal and perinatal deaths have occurred and analyze the recommendations received.
F. To provide necessary technical assistance, directed towards issues related to maternal and perinatal death, in the basic training of health workers.
G. To provide necessary assistance for capacity building and implementation of MPDSR.
H. To include MPDSR related statistics in the Annual Report of the Department of Health Services.
I. To monitor and follow up the implementation of MPDSR program at local level, Health facilities, province and health offices on a regular basis.
J. To verify the timeliness and completeness of data received from local level, district, province and health facilities on a regular basis and provide support.
K. To analyze data from the MPDSR program, prepare annual report and action plans based on the information obtained from the analysis and include it in policy plan.
L. To ensure that meetings of the National MPDSR Committee are held once in 6 months as far as possible, if not possible then at least once a year.

6.3 Technical Working Group (TWG) members at Federal level

The TWG will be at the Federal (Central) level, headed by the Director of Family Welfare Division. The technical working group will have the following officials.

A. Director General, Department of Health Services - Guardian
B. Director, Family Welfare Division - Chairperson
C. Health Management Information System, Management Division, Section Chief - Member
D. Maternal and Newborn Section, Section Chief - Member
E. Child Health and Immunization Section, Section Chief - Member
F. Paropakar Maternity and Women's Hospital, Obstetrician And Gynecologist - Member
G. Paropakar Maternity and Women's Hospital, Pediatrician - Member
H. NESOG Representative - Member
I. PESON or NEPAS Representative - Member
J. Quality, Standards and Regulation Division, Ministry of Health and Population Representative - Member
K. Representative of Private Health Institution Organization - Member
L. Invitee members as specified by the committee - Member

6.4 Functions, duties, and rights of the TWG at Federal level

A. To provide recommendations for conducting and expanding activities related to MPDSR in the country.
B. To discuss the recommendations provided by all levels upto the local level for reducing maternal and perinatal deaths and the status of implementation of those recommendations.
C. To change/modify policies as per the need and recommendations received from the reviews.
D. To make recommendations in the annual action plan and policies based on the analysis of data received from local level and health facilities.
E. To review the MPDSR report.

6.5 Response activities at Federal level

The Federal MPDSR committee should review maternal and perinatal deaths and prevention programs implemented by local health facilities, local level, health facilities, health offices and the province and respond as required, e.g.:

1. Implement the recommendations provided by MPDSR committees at various levels.
2. Take initiative to give continuity by allocating resources (such as human

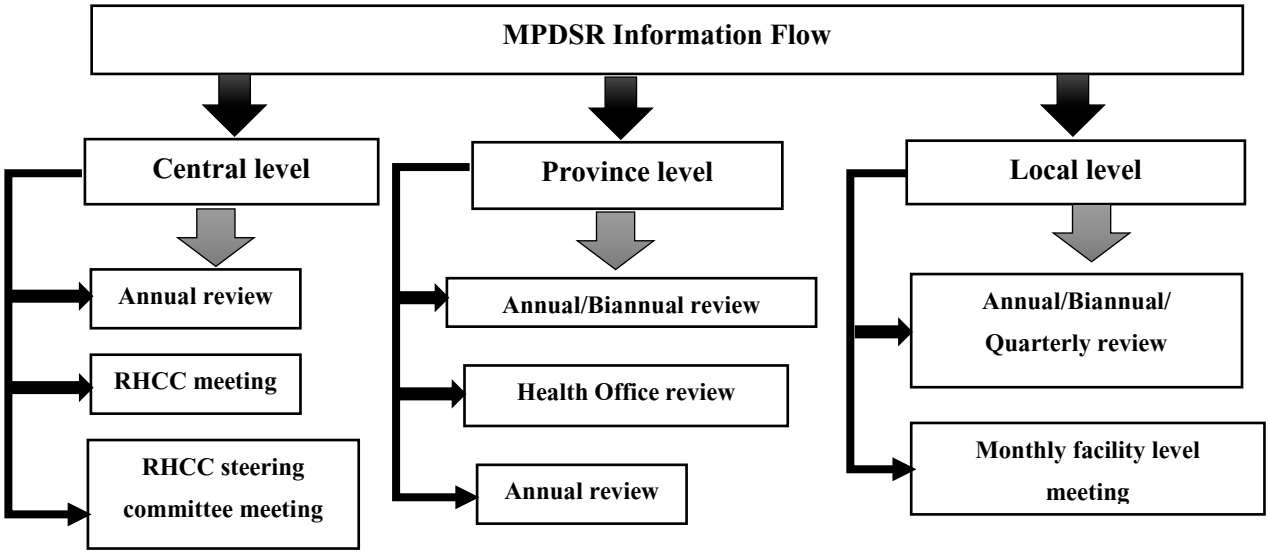
resources, financial resources, tools and institutional development).

3. Review maternal and perinatal deaths at national level and take initiative to reduce deaths using appropriate technology.
4. Coordinate and cooperate with the concerned ministries and stakeholders on a regular basis.
5. Include programs to reduce maternal and perinatal deaths in periodic plans.
6. Prepare and implement programs in line with national and international commitments.
7. Regular communication with the officials responsible for making decisions, to bring necessary improvements in maternal and newborn health.
8. To give priority to necessary study and research in the field of maternal and child health, and to coordinate with concerned agencies for the same.

6.6 Flow of information on review findings, recommendations, and feedback at Federal (National) level

The findings of each maternal and perinatal death review should be discussed and made public regularly at the relevant level.

Figure 5: MPDSR information flow



There are different ways of publicizing the findings and the method of publicity may vary according to the target group concerned. Findings should be shared in a language that the target audience can understand. While presenting the findings of the review, the message should be conveyed in terms of reforms that are possible at that level. The most commonly used methods of publicity are as follows:

- Annual report
- Web site
- Presentation
- Documentary
- Print and electronic media
- Conference
- Journals and other publications

6.7 Monitoring and evaluation of MPDSR system at Federal level

It is important to ensure that every level of the MPDSR system is functioning properly. After that, continuous monitoring, evaluation and supervision should be done to strengthen the system over time. In addition, to investigate the areas covered by the system, it is necessary to monitor, evaluate and supervise the timely flow of information. Monitoring from the centre, province, and local levels can contribute to the improvement of the MPDSR system. The program will be monitored through indicators determined by the National MPDSR committee and those indicators should be measured annually.

Although the measurement of monitoring indicators reflects the evolution of the system, it is sometimes necessary to make a detailed assessment along with it. Detailed evaluation is required, especially in the following cases:

1) If the indicator measured shows that the expected target is not achieved

2) If there is no reduction in maternal and perinatal deaths

If the death rate is not reduced, then it is understood that the program is not working properly, because the main purpose of the MPDSR system is to reduce maternal and perinatal death. Therefore, it is necessary to make a detailed assessment from the local level, province and centre to identify the reasons for sub-optimal implementation of the program. However, the quality of information in the MPDSR system should be periodically evaluated as much as possible. At the same time, the acceptability of the system, the quality of data and sustainability should be constantly evaluated.

Efficiency:

The efficiency of the system can be assessed on the basis of whether there is any obstacle in the implementation of some important steps of MPDSR system such as: identification, notification, review, analysis, reporting and response of maternal and perinatal death. The use of computers in information systems and data management helps to increase the efficiency of the system, but it requires trained human resource. As far as possible, it is very important to have an electronic system from the federal to the local level.

Effectiveness:

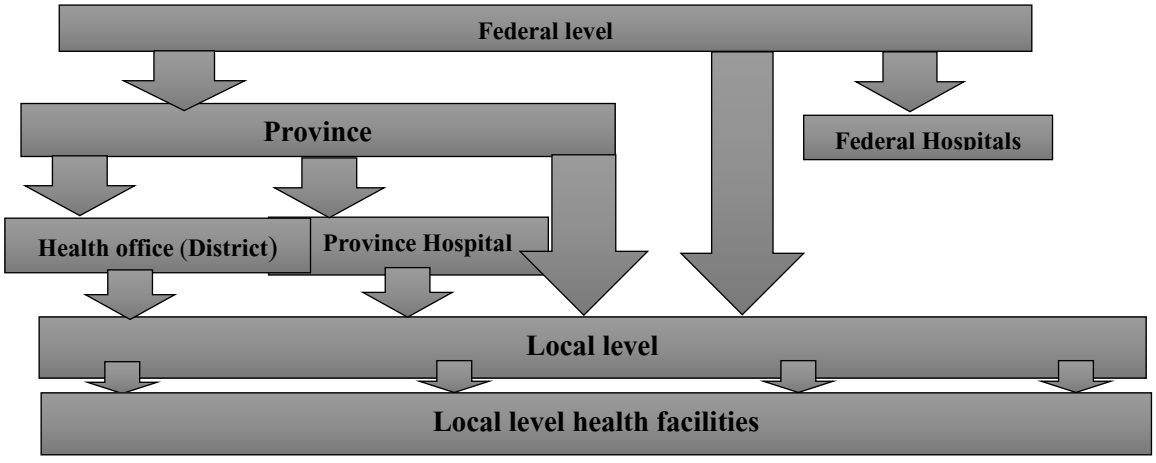
Evaluating the effectiveness of the MPDSR system can be done by studying whether the recommendations provided at various levels have been implemented or not and if implemented the expected results have been achieved. If the targets have not been achieved, the specific reason for it can be identified. The methods of such assessment depend on the current situation of the community and the health facilities. Evaluating the effectiveness begins with the findings, recommendations, and implementation of maternal and perinatal death reviews. In order to measure the effectiveness of this system, it is necessary to identify the reasons for non-implementation and evaluate whether the expected achievements have been achieved.

6.8 Supervision

To ensure that the MPDSR is being implemented properly, the federal, state and local levels need to carry out intensive collaborative supervision of the respective bodies under their jurisdiction.

- There should be annual supervision of health facilities at the federal, state and local levels.
- Supervision of local level, health facilities should be done bi-annually from the province.
- Supervision should always be helpful, not finding fault.
- After the supervision, the supervisor should provide necessary assistance and recommendations to the concerned body and submit the check list used in the supervision to the concerned office head and also submit the report to higher authorities.

Figure 6: Institutional Structure for Supervision



7. Confidentiality

All maternal and perinatal information will be kept confidential. Only collected information without revealing anyone's identity will be made public. If information of a particular event (death) has to be made public, the identity of the person will be kept secret and only other information will be made public. Apart from this, the identity of the person giving the information, the review team and the health worker who will be with the deceased at the time of death will also be kept confidential. The information of any deceased will be used only for maternal and perinatal death review and oral examination.

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Annex 1.

Glossary

The following are the definitions of maternal and perinatal deaths according to the International Classification of Diseases (ICD-10) and WHO.

Pregnancy Related Deaths: The death of a woman during pregnancy or within 42 days of termination of pregnancy due to any cause. It includes accidental or intentional deaths.

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

Direct Maternal Death: Death of a woman during pregnancy or childbirth or within 42 days of termination of pregnancy (Pregnancy, labor and puerperium) due to pregnancy or obstetric or postpartum complications or due to incorrect treatment/interventions, omissions or conditions arising from those conditions.

Indirect Maternal Death: Death of a woman resulting from previously existing diseases, or from diseases that developed during pregnancy and that were not due to direct obstetric causes but aggravated by physiological effects of pregnancy.

Fortuitous or incidental death: Death of a woman due to any event other than pregnancy or obstetric causes.

Perinatal death: The death of a fetus from 28 weeks of gestation (OR weighing at least 1000 grams OR Length atleast 35 cms) to first 7 days of life (early neonatal period) (ICD-10). This includes the newborn baby who died at birth (Stillbirth) or died within seven days of birth (Early Neonatal Death).

Stillbirth: A baby born with no signs of life at the time of birth, with 28 or more weeks of gestation OR weighing more than or equal to 1000 gms or length more than or equal to 35 cms. (ICD-10)

Early neonatal deaths: Death of an infant during the first week of life (first 7 days).

Relevant body: Maternal death in the hospital should be reported to the relevant body within 24 hours of death. Relevant body means the level of health institution to whom to inform.

E.g.

- For Maternal deaths in local level health facilities: Inform the local level
- For Maternal deaths in provincial hospitals: Report to the provincial health directorate
- For Maternal Deaths in Federal Hospitals: Report to the Family Welfare Division

Health Institutions: Health Institutions include government or government owned hospitals, teaching hospitals, primary health centers and health posts providing safe delivery services, community hospitals, mission hospitals providing safe delivery services recognized by the Government of Nepal and Private and non-governmental organizations and maternity centers. The newborn infant care program should

be understood as a free neonatal treatment service provided by government hospitals and community hospitals where the program is implemented.

Health Institution Operation and Management Committee: Health Institution Operation and Management Committee means the Health Institution Management Committee or Hospital Management Committee in health facilities, under the Government of Nepal, constituted in accordance with the law of the Government of Nepal. In the case of private and non-governmental organizations, it is the Board of Directors constituted by the statutory process of such organizations.

Ministry: Ministry means the Ministry of Health and Population.

Hospital / Health facility: Hospital means a health facility under the government of Nepal, province government and local government, primary health center and health post providing free neonatal treatment program, community hospital providing free neonatal treatment service recognized by the government of Nepal.

Government of Nepal: Government of Nepal means the Ministry of Health and Population.

Local level: Local level means rural municipality, urban municipality, sub-metropolitan or metropolitan.

Committee: In the case of health facilities under the Government of Nepal, it means the Health Institution Management Committee or Hospital Management Committee constituted in accordance with the law of the Government of Nepal. The term also refers to the Board of Directors constituted by the statutory process of private and non-governmental organizations.

Annex 2.

Notification Form

MPDSR Tool 1

गोप्य

यो सूचना मातृ मृत्युको निगरानी र प्रतिकार्य तथा सामुहिक रुपमा तथ्यांकीय प्रयोजनका लागि नेपाल सरकारका स्वास्थ्य निकायहरुले मात्र प्रयोग गर्नेछन्।

नेपाल सरकार

स्वास्थ्य तथा जनसंख्या मन्त्रालय

स्वास्थ्य सेवा विभाग

परिवार कल्याण महाशाखा

मातृ मृत्यु निगरानी तथा प्रतिकार्य सम्बन्धी

१२ देखि ५५ बर्ष सम्मका महिलाको मृत्यु सूचना फारम

[महिला सामुदायिक स्वास्थ्य स्वयं सेविकाहरुले मृत्यु भएको / भएको थाहा भएको थाहा पाएको २४ घण्टा भित्र सम्बन्धित स्वास्थ्य संस्थामा सुचित गर्ने प्रयोजनका लागि]

१. मृतक महिलाको पूरा नाम र थर : _____

२. मृत्यु भएको मिति: ☐☐ ☐☐ ☐☐☐☐

गते *महिना* *साल*

३. मृत्यु हुँदाको उमेर: ☐☐ (*पूरा गरेको वर्ष*)

४. मृतकको श्रीमान वा अभिभावकको पूरा नाम र थर: _____ _____

५. फोन / मोवाइल नं. : _____

मृतकको हाल वसोवासको ठेगाना:

प्रदेश: _____ जिल्ला: _____ स्थानीय तह: _____

वडा नम्बर: ☐☐ गाउँ / टोल: _____

यो सुचना फारम भर्ने स्वयं सेविकाको

नाम: _____ पद: _____

ठेगाना: (स्थानीय तह, वडा नं.)_____

फारम भरेको मिति: ☐☐ ☐☐ ☐☐☐☐

यो फारम, सम्बन्धित स्वास्थ्य संस्थामा पठाएको वा खबर गरेको मिति: ☐☐ ☐☐ ☐☐☐☐

स्वास्थ्य संस्थामा यो सूचना फारम बुझिलिने व्यक्तिको

नाम: _____ पद: _____

ठेगाना: _____

फारम बुझिलिएको मिति: ☐☐ ☐☐ ☐☐☐☐

Annex 3.

Screening Form

MPDSR Tool 2

नेपाल सरकार

स्वास्थ्य तथा जनसंख्या मन्त्रालय

स्वास्थ्य सेवा विभाग

स्वास्थ्य संस्थाको नाम _____

मातृ मृत्यु निगरानी तथा पतिकार्य प्रयोजनका लागि

मातृ मृत्युको प्रारम्भिक पहिचान फारम

गोप्य
यो सुचना मातृ मृत्युको निगरानी र प्रतिकार्य तथा सामुहिक रुपमा तथ्यांकीय प्रयोजनका लागि नेपाल सरकारका स्वास्थ्य निकायहरुले मात्र प्रयोग गर्नेछन

[महिला सामुदायिक स्वास्थ्य स्वयम् सेविका वा अन्य सूचक मार्फत १२ देखी ५५ बर्ष सम्मका महिलाको मृत्यु भएको सुचना प्राप्त भए पछी सो मातृ मृत्यु हो वा होइन भनि प्रारम्भिक यकीन गर्न स्वास्थ्य कर्मिकर्मिले यो फारम भर्नु पर्दछ]

१. मृतक महिलाको पूरा नाम र थरः _____

२. मृत्यु भयेक मितिः ☐☐ ☐☐ ☐☐☐☐
गते महिना साल

३. मृत्यु हुँदाको उमेर : ☐☐ *(पुरा गएको बर्ष)*

४. मृतकका श्रीमान वा अभिभावकको पूरा नाम र थरः _____

५. फोन / मोबाइल नम्बरः _____

<u>मृतकका हालको बसोबासको ठेगानाः</u>

प्रदेशः _____ जिल्लाः _____ स्थानीय तहः _____

वडा नम्बरः ☐☐ गाउँ / टोलः _____

मातृ मृत्यु छुट्याउने प्रश्नहरु (Maternal Death Screening Questions)		
१	के उहाँ (मृतक)को मृत्यु गर्भवती अवस्थामा भएको हो ?	हो——१ होइन——२ थाहा छैन——९६
२	के उहाँ (मृतक)को मृत्यु बच्चा जन्माउने बेलामा (प्रसुती अवस्थामा) भएको हो ?	हो——१ होइन——२ थाहा छैन——९६

३	के उहाँ (मृतक)को मृत्यु बच्चा जन्माएको (सुत्केरी भएको) ४२ दिन भित्र भएको हो ?	हो————————————१ होइन————————————२ थाहा छैन————————————९६
४	के उहाँ (मृतक) को मृत्यु गर्भ खेर गएको वा गर्भपतन गराउँदा वा गराएको ४२ दिन भित्र भएको हो ?	हो————————————१ होइन————————————२ थाहा छैन————————————९६

माथिका चार प्रश्नहरु मध्ये कुनै एक प्रश्नको जवाफ "हो" भन्ने आएमा मातृ मृत्यु भएको हुन सक्छ स्थानीय तहमा मौखिक परिक्षण (Verbal Autopsy) का लागि तुरुन्त खबर गर्नुहोस	***माथिका सबै चार प्रश्नको जवाफ "होइन" भन्ने आएमा : स्थानीय तहमा अभिलेख गर्नुहोस***

फारम भर्ने कर्मचारी तथा आगामी कार्यवाही सम्बन्धि विवरण

यो मातृ मृत्युको प्रारम्भिक पहिचान (Screening) फारम भर्ने स्वास्थ्यकर्मिको:

नाम:_____ पद: _____

कार्यरत संस्थाको ठेगाना: _____

फारम भाटको मिति: __ __ / __ __ / __ __ __ __

मातृ मृत्यु भएको हुन सक्ने देखिएकोमा मौखिक परिक्शंका लागि स्थानीय तहमा मौखिक परिक्षणका लागि विवरण पठाउने स्वास्थ्यकर्मीको

नाम: _____ पद: _____

ठेगाना: _____

फारम पठाएको वा खबर गरेको मिति __ __ / __ __ / __ __ __ __

फारम पठाएको वा खबर गरेको माध्यम (जस्तै: हुलाक, हाते सन्देश, फोन, इमेल, मेसेज, आदि)

_____

Annex 4.

Verbal Autopsy Form

नेपाल सरकार
स्वास्थ्य तथा जनसंख्या मन्त्रालय
स्वास्थ्य सेवा विभाग
परिवार कल्याण महाशाखा
टेकु, काठमाडौ
मातृ मृत्यु निगरानी तथा प्रतिकार्य, २०७८
मातृ मृत्यु मौखिक परिक्षण प्रश्नावली (VA Form)

MPDSR Tool: 3

यो फाराम चिकित्सकिय कानूनी (Medicolegal) प्रयोजनको लागि हैन ।

१२ देखि ५५ बर्षका महिलाको कुनै पनि दुर्घटना वा नियतवस भएको घटना बाहेक गर्भावस्थामा वा गर्भावस्था अन्त भएको ४२ दिन भित्रमा गर्भसँग सम्बन्धित कारण वा गर्भको कारण बनेको थप जटिल अवस्था वा यस अवस्थाको व्यवस्थापनको कारणले हुने मृत्युलाई मातृ मृत्यु भनिन्छ । यसले जुनसुकै अवधिको गर्भ र गर्भाशय भित्र वा अन्य कतै भएको गर्भलाई पनि समावेश गर्छ ।

यदि समुदायमा सम्भावित मातृ मृत्यु भएमा सो मृत्युको कारण "मौखिक परीक्षण" (Verbal Autopsy) द्वारा पत्ता लगाउनु पर्दछ । मौखिक परीक्षण भनेको विरामीको मृत्यु हुनका लागि श्रृंखलावद्दरुपमा घटेका घटना, परिस्थीति, संकेत तथा लक्षणहरु केलाई मृत्युको प्रमुख कारण पत्ता लगाउन मृतकका नातेदार तथा आफन्तहरुसँग गरिने प्रश्नावलीमा आधारीत अन्तर्वाता हो ।

समुदाय तहको स्वास्थ्य संस्थाबाट सम्भावित मातृ मृत्यु भएको जानकारी प्राप्त भएको ३० दिन भित्र स्थानीय तहको स्वास्थ्य महा/शाखाबाट भर्वल अटोप्सी गर्नु पर्दछ । मौखिक परिक्षण (VA) गरे पश्चात स्थानीय तहको स्वास्थ्य महा/शाखाले, स्थानिय तह वा स्वास्थ्य कार्यालयमा उपलव्ध तालिम प्राप्त चिकित्सकको सहयोगमा मृत्युको कारण (Cause of death assign) उल्लेख गर्नु पर्दछ ।

यस प्रश्नावलीमा १-११ खण्डहरु छन् । अन्तर्वार्ता लिने व्यक्तिले सबै खण्ड पुरा गर्नु पर्दछ र सो फारमको online इन्ट्री स्थानीय तहमा गर्नु पर्दछ ।

१. परिचयात्मक विवरण

क्र.सं.	मृत्यु भएको महिलाको विवरण	
१०१	महिलाको पूरा नाम र थर	_____
१०२	श्रीमान / अभिभावकको पूरा नाम र थर	_____
मृतक महिलाको हाल बसोबासको ठेगाना		
१०३	प्रदेश	_____
१०४	जिल्ला	_____
१०५	स्थानिय तह	.....
१०६	वडा नं.	☐☐
१०७	गाउँ/टोल	_____

भौगोलिक अवस्थिति (सम्भव भए भर्ने)		
१०८	**Latitude -**अक्षांस (डिग्री, दशमलब)- उत्तर	
१०९	**Longitude** – देशान्तर (डिग्री, दशमलब)- पूर्व	
११०	**Accuracy** – शुद्धता	
१११	**Altitude -** उचाई	

नोट: ***उत्तरदाता छनौट गर्नका लागि धेरै व्यक्तिहरुसंग जानकारी लिनुहोस् । तर मुख्य उत्तरदाता छनौट गर्दा निम्न बुँदाहरुमा ध्यान दिनु पर्दछ ।***

- ***महिलाको मृत्यु भएको परिस्थिति, मृत्यु हुँदाको अवस्था र उपचार सम्बन्धमा बताउन सक्ने व्यक्ति***
- ***मृत्यु हुँदा संगै भएको व्यक्ति***
- ***मृतक महिलासंग नजिकको सम्बन्ध भएको व्यक्ति***
- ***अन्तर्वार्ताको लागि उपलब्ध भएको व्यक्ति***

२. उत्तरदाता सम्बन्धी विवरण

प्र.नं.	प्रश्न तथा फिल्टर	प्रत्यूत्तर
२०१	उत्तरदाताको पूरा नाम र थर	_____
२०२	उत्तरदाताको सम्पर्क नं. वा ईमेल ठेगाना (यदि उत्तरदाताको सम्पर्क नं. नभए परिवारको अन्य सदस्यको सम्पर्क नं.)	सम्पर्क नं. -_____ ईमेल ठेगानाः _____
२०३	उहाँ (मृतक) को तपाई (उत्तरदाता) संग के नाता, सम्बन्ध छ?	श्रीमान ..... १ आमा/बुवा/सासु/ससुरा..... २ छोरा/छोरी ..... ३ परिवारको अन्य सदस्य ..... ४ सेवा प्रदायक ..... ५ अन्य (खुलाउने) _____९६
२०४	तपाई उहाँ (मृतक) को मृत्यु भएको समयमा उहाँ (मृतक) संगै हुनुहुन्थ्यो?	थिए..... १ थिइन..... २

सूचित मञ्जुरी

नमस्ते, मेरो नाम ..... हो । हामी..... बाट आएका हौं । यस परिवारमा भएको निधनको दुखद घटनाले हामीलाई दुःखी बनाएको छ । यस घटनाबाट पाठ सिकेर आगामी दिनमा यस्ता घटना दोहोरिन नदिन के गर्नुपर्ला भन्ने सुझाब लिन आएका छौ । तपाइले दिनु भएको जानकारीहरुले नेपाल सरकारलाई सुरक्षित मातृत्व सेवामा सुधार ल्याइ महिलाहरुलाई अकालमा हुने मृत्युबाट जोगाउन मद्दत पुग्नेछ । यस सोधपुछका लागि करिब एक घण्टा समय लाग्नेछ । तपाइले दिनु भएका सम्पुर्ण जानकारीहरु गोप्य राखिने छन र स्वास्थ्य सेवा सुधारका लागि मात्र प्रयोग गरिनेछ । यस छलफलमा सहभागी हुने वा नहुने तपाइको स्वेच्छाको कुरा हो । यदि तपाई कुनै प्रश्नको जवाफ दिन चाहनु हुन्न भने नदिन पनि सक्नु हुन्छ र तपाइले चाहनु भयो भने कुनै पनि बेला यो अन्तरवार्ता टुङ्ग्याउन सक्नु हुन्छ । तथापी, सम्पुर्ण प्रश्नहरुको सही जवाफ दिई स्वास्थ्य सेवा सुधार सम्वन्धी यस कार्यमा साथ दिनुहुन म आग्रह गर्दछु । तपाईले यस विषयमा थप जानकारी लिन चाहनुभएमा सम्बन्धित स्थानीय तहमा सम्पर्क गर्न सक्नुहुनेछ ।

के तपाई यस विषयमा कुनै कुरा सोध्न चाहनु हुन्छ ?

के तपाई यस अन्तरवार्तामा सहभागी हुन सहमत हुनुहुन्छ ?

उत्तरदाताले अन्तरवार्ता दिन मानेको .....१ उत्तरदाताले अन्तरवार्ता दिन नमानेको .....२ (अन्तरवार्ता समाप्त गर्ने)

३. महिलाको मृत्यु सम्बन्धी विस्तृत विवरण

कृपया, उहाँ (मृतक) को मृत्यु सम्बन्धमा शुरु देखीका थाहा भएका कुराहरु विस्तार पुर्वक बताइ दिनुहोस् ।

नोटः उत्तरदातालाइ आफुखुसी भन्न दिनुहोस् र तल उल्लेखित महत्वपूर्ण जानकारीहरु नछुट्ने गरि टिपोट गर्नुहोस । आबस्यक परे थप स्पष्ट पार्न अनुरोध गर्नुहोस । यो पानामा विवरण नअटेमा पाना थप गर्नुहोस र फारामसँग संलग्न (नथ्थी) गर्नुहोस् ।

• उहाँ (मृतक) विरामी हुनुभएको थियो, थियो भने कहिलेदखि र कसरी थाहा भयो ?	• उपचार गराउनका के- के तयारीहरु गरियो (जस्तैः यातायात, पैसा, साथी आदी) ?
• के कस्ता लक्षणहरु देखिएका थिए ?	• स्वास्थ्य संस्था पुग्न कति समय लाग्यो ?
• घरमा के के गरियो, कसले गरे ?	• स्वास्थ्य सस्थामा पुगिसकेपछि के भयो? प्रेषण सम्वन्धि जानकारी
• उपचार गराउनुपर्छ भन्ने निर्णय गरेको भए कसले गर्यो, किन गरियो ?	• स्वास्थ्यकर्मीले जाँच्नुभन्दा अगाडी कति समय लाग्यो?
• यदि उपचार नगराएको भए किन उपचार गराउनु भएन ?	• कसले जाँच्यो, के के गरियो?
• बिरामी भए देखि मृत्यु हुने अवस्था सम्म के-के- स्वास्थ्य समस्या भए ?	• कति खर्च लाग्यो?
• उपचार गराउने निर्णय गरेको भए, निर्णय गर्न कति समय खर्च भयो ?	• अन्य के के समस्याहरु भए?
• उपचार कहाँ गराउने निर्णय भयो, किन ?	

मृत्यु सम्बन्धी विस्तृत विवरण

४. **मृतक-महिलाको व्यक्तिगत विवरण**

प्र.नं	प्रश्न	उत्तर			निर्देशन तथा कैफियत
४०१	***[नोटः उहाँ (मृतक) को मृत्यु गर्भसँग सम्बन्धित कुन अवस्थामा भएको थियो सोध्नुहोस् र उपयुक्त जवाफमा गोलो लगाउनुहोस् ।]*** उहाँ (मृतक) को मृत्यु	**हो**	**होइन**	**थाहा छैन**	
क	गर्भवती अबस्थामा भएको हो ?	१ ***(४०२ मा जाने)***	२	९८	
ख	बच्चा जन्माउने बेलामा (प्रसुती अवस्था) भएको हो?	१ ***(४०२ मा जाने)***	२	९८	
ग	बच्चा जन्माएको (सुत्केरी भएको) ४२ दिनभित्र भएको हो?	१ ***(४०२ मा जाने)***	२	९८	
घ	गर्भ खेर गएको वा गर्भपतन गराउँदा वा गराएको ४२ दिन भित्र भएको हो?	१ ***(४०२ मा जाने)***	२	९८	
४०२	उहाँको मृत्यु कहिले भएको थियो?	गते महिना वर्ष थाहा छैन ९८			

प्र.नं	प्रश्न	उत्तर	निर्देशन तथा कैफियत
४०३	मृत्यु हुँदा उहाँ (मृतक) कति वर्षको हुनुहुन्थ्यो? *(पूरा गरेको बर्ष)*	☐☐ वर्ष	
४०४	मृत्यु हुँदा उहाँ (मृतक) को वैवाहीक स्थिति के थियो?	अविवाहित ..... १ विवाहित ..... २ विधवा ..... ३ पारपाचुके ..... ४ छुट्टिएको..... ५ विवाह नगरी संगै बसेको (लिविंग टुगेदर) ..... ६ थाहा छैन ९८	
४०५	उहाँ (मृतक) ले कति कक्षा सम्म अध्ययन गर्नु भएको थियो? *(पुरा गरेको कक्षा सोध्नुहोस ।)*	लेखपढ गर्न नसक्ने .....१ लेखपढ गर्न सक्ने .....२ पूरा गरेको कक्षाः _____ थाहा छैन ९८	
४०६	मृत्यु हुनु भन्दा पहिले १२ महिना भित्रको समयमा उहाँ (मृतक) को रोजगारीको वा आर्थिक अवस्था के थियो ?	प्राय आर्थिक रूपले सक्रिय / रोजगार ..१ बेरोजगार / आर्थिक रूपले निस्क्रिय ....२ थाहा छैन.....९८	
४०७	उहाँ (मृतक) को जातजाती के थियो ? (***जातजाती कोडको लागि अनुसूची हेर्नुहोस्***)	दलित .....१ पहुँच नभएका जनजाति.....२ तराई जाति .....३ मुस्लिम .....४ तुलनात्मक रुपले पहुँच भएका जनजातिहरु .....५ उपल्लो जातिय समूह.....६ अन्य.....९६ थाहा छैन.....९८	
४०८	उहाँ (मृतक) को मृत्यु कुन ठाउँमा भएको थियो? ***[नोट: यदि स्वास्थ्य संस्थामा मृत्यु भएको भए स्वास्थ्य संस्थाको नाम उल्लेख गर्नुहोस् ।]*** _____	स्वास्थ्य चौकी .....१ प्रा.स्वा.के. .....२ सरकारी अस्पताल ..... ३ नीजि अस्पताल .....४ गै.स.स./मिशन अस्पताल .....५ शिक्षण अस्पताल..... ६ घरमा ..... ७ घरवाट स्वास्थ्य संस्था जाँदा बाटोमा ८ एउटा स्वास्थ्य संस्थावाट अर्को स्वा.सं. जाँदा बाटोमा..... ९ अन्य (खुलाउने) _____९६ थाहा छैन ९८	
अब म तपाईसँग उहाँ (मृतक) गर्भवती हुनु भन्दा अगाडीको उहाँको स्वास्थ्य अवस्था बारे केही प्रश्न सोध्न चाहन्छु ।			

प्र.नं	प्रश्न	उत्तर			निर्देशन तथा कैफियत
४०९	***[नोटः उहाँ (मृतक) गर्भवती हुनु भन्दा अगाडी उहाँलाई निम्न लिखित स्वास्थ्य समस्याहरु थिए की थिएनन् एक एक गरी सोध्नुहोस् र उपयुक्त जवाफमा गोलो लगाउँनुहोस ।]*** उहाँ गर्भवती हुनु भन्दा अगाडी उहाँलाई	**थियो**	**थिएन**	**थाहा भएन**	**जवाफ दिन नमानेको**
क	मधुमेह (चिनी रोग) थियो ?	१	२	९८	९९
ख	उच्च रक्तचाप थियो ?	१	२	९८	९९
ग	मुटु सम्बन्धि समस्या थियो ?	१	२	९८	९९
घ	थाईराईड सम्बन्धि समस्या थियो ?	१	२	९८	९९
ङ	अन्य कुनै दिर्घरोग थियो ? थियो भने "१" मा गोलो लगाएर खुलाउनुहोस् | (खुलाउनुहोस्) _____	१	२	९८	९९
च	बिगत १२ महिनामा मृतकको कुनै अपरेसन (बेहोस बनाएर वा शरीरको कुनै अंग लठ्याएर गरिने) भएको थियो ?	१	२	९८	९९
	[नोटः प्र. नं. ४०१ रुजु गर्नुहोस् ।] ***गर्भवती अवस्थामा मृत्यु भएको (प्र. नं. ४०१.क को १ मा गोलो लगाएको भए)*** ***अन्य अवस्थामा मृत्यु भएको (प्र. नं. ४०१.ख, ४०१.ग वा ४०१.घ को १ मा गोलो लगाएको भए)*** → ***(खण्ड ५ मा जाने)***				
४१०,	यदि मृत्यु गर्भवती अवस्थामा भएको भए, मृत्युको समयमा उहाँ (मृतक) कति महिनाको गर्भवती हुनुहुन्थ्यो? ***(पुरा भएको महिनामा उल्लेख गर्नुहोस)***	☐☐ महिना थाहा छैन ९८			

५. गर्भ अवस्थासंग सम्बन्धित संकेत चिन्ह तथा लक्षणहरू

प्र.नं.	प्रश्न तथा फिल्टर	प्रत्यूत्तर				निर्देशन तथा कैफियत
		थियो/हो	थिएन/होइन	थाहा छैन	जवाफ दिन नमानेको	
५०१	उहाँको यो कति औं पटकको गर्भ थियो ? ***(यदि पहिलो गर्भ भए ०१ लेख्नुहोस्)***	☐☐		९८	९९	
५०२	उहाँको कहिल्यै गर्भपतन गरेको वा गर्भ खेर गएको थियो ? ***(यदि थियो भने कति पटक हो सो नम्बर लेख्नुहोस् र यदि थिएन भने "00" लेख्नुहोस्)***	☐☐		९८	९९	
५०३	उहाँ (मृतक) ले कति जना जीवित बच्चा जन्माउनु भएको थियो? (***यदि थिएन भने "00" लेख्नुहोस्)***	☐☐		९८	९९	
५०४	उहाँ (मृतक) ले कति जना मरेको बच्चा जन्माउनु भएको थियो ? (***यदि थिएन भने "00" लेख्नुहोस्)***	☐☐		९८	९९	
५०५	उहाँ (मृतक) ले पहिले शल्यकृया गरि बच्चा जन्माउनु भएको थियो ?	१	२	९८	९९	
५०६	यो गर्भ उहाँ (मृतक) को इच्छा अनुसार भएको थियो ?	१	२	९८	९९	

प्र.नं.	प्रश्न तथा फिल्टर	प्रत्यूत्तर							निर्देशन तथा कैफियत
		थियो/ हो	थिएन/होइन	थाहा छैन	जवाफ दिन नमानेको				
५०७	उहाँ (मृतक) ले डाक्टर, नर्स वा अन्य स्वास्थ्यकर्मीबट गर्भवती जाँच सेवा लिनु भएको थियो ?	१	२ *(५१० मा जाने)*	९८ *(५१० मा जाने)*	९९ *(५१० मा जाने)*				
५०८	(उहाँ) ले गर्भवती जाँच सेवा लिएको भए कति पटक जाँच गराउनु भएको थियो?	☐☐		९८	९९				
५०९	उहाँले निम्न अनुसार गर्भवती जाँच गर्नुभएको थियो ?								
क	उहाँले चौथो (४) महिनाको गर्भवती जाँच गर्नुभएको थियो ?	१	२	९८	९९				
ख	उहाँले छैटौं (६) महिनाको गर्भवती जाँच गर्नुभएको थियो ?	१	२	९८	९९				
ग	उहाँले आठौं (८) महिनाको गर्भवती जाँच गर्नुभएको थियो ?	१	२	९८	९९				
घ	उहाँले नवौं (९) महिनाको गर्भवती जाँच गर्नुभएको थियो ?	१	२	९८	९९				
५१०	***[नोटः गर्भवती अवस्थामा हुन सक्ने निम्न समस्याहरूलाई एक एक गरी सोध्नुहोस र उपयुक्त जवाफमा गोलो लगाउँनुहोस । यदि कुनै समस्याको जवाफ "थियो" भन्ने आएमा, कति दिनको लागि उक्त समस्या भएको थियो सो "अवधीः दिन" मा खुलाउनुहोस्]*** यस (पछिल्लो) पटक गर्भवती हुँदा *उहाँ (मृतक)* लाई	**थियो**	**थिएन**	**थाहा छैन**	**जवाफ दिन नमाने को**	**अवधी (दिनमा लेख्ने)**			
क	गर्भावस्थामा योनिबाट मैलो गन्हाउने पानी बगेको थियो ?	१	२	९८	९९				
ख	गर्भावस्थामा ज्वरो आएको थियो ?	१	२	९८	९९				
ग	गर्भावस्थामा उच्च रक्तचाप सम्बन्धि समस्या थियो ?	१	२	९८	९९				
घ	गर्भावस्थामा कम्पन हुने समस्या थियो ?	१	२	९८	९९				
ङ	गर्भावस्थामा आँखा धमिलो देख्ने, टाउको दुख्ने, रिंगटा लाग्ने, माथिल्लो पेट दुख्ने समस्या थियो ?	१	२	९८	९९				
		थियो	**थिएन**	**थाहा छैन**	**जवाफ दिन नमाने को**	**अवधी (दिनमा लेख्ने)**			
च	गर्भावस्थामा योनीबाट रक्ताश्राब भएको थियो ?	१	२	९८	९९				
छ	गर्भावस्थामा तल्लो पेट दुख्ने समस्या थियो ?	१	२	९८	९९				
ज	गर्भ पाठेघर बाहिर बसेको थियो?	१	२	९८	९९				
झ	भ्रुण (पेट भित्रको बच्चा) धेरै चल्ने वा चल्दै नचल्ने समस्या थियो ?	१	२	९८	९९				
ञ	गर्भावस्थामा कमलपित्त (जन्डिस) भएको थियो ?	१	२	९८	९९				
ट	गर्भावस्थामा औलो भएको थियो ?	१	२	९८	९९				

प्र.नं.	प्रश्न तथा फिल्टर	प्रत्यूत्तर					निर्देशन तथा कैफियत	
		थियो/ हो	थिएन/होइन	थाहा छैन		जवाफ दिन नमानेको		
ठ	गर्भावस्थामा क्षयरोग भएको थियो ?	१	२	९८	९९			
ड	गर्भावस्थामा मधुमेह (चिनी रोग) भएको थियो ?	१	२	९८	९९			
ढ	गर्भावस्थामा मुटुजन्य रोग भएको थियो ?	१	२	९८	९९			
ण	गर्भावस्थामा थाईरोईडको समस्या भएको थियो ?	१	२	९८	९९			
त	गर्भावस्थामा कुनै माहामारी जन्य रोगको संक्रमण भएको थियो ?	१	२	९८	९९			
थ	गर्भावस्थामा रक्तअल्पता भएको थियो ?	१	२	९८	९९			
द	अन्य (खुलाउने) _____	१	२	९८	९९			

६. गर्भपतन सम्बन्धि विवरण

	[नोटः प्र. नं. ४०१ रुजु गर्नुहोस् ।] ***गर्भ खेर गएको वा गर्भपतन गराउँदा वा गराएको ४२ दिन भित्र मृत्यु भएको (प्र. नं. ४०१.घ को १ मा गोलो लगाएको भए)***	***अन्य अवस्थामा मृत्यु भएको (प्र. नं. ४०१.क, ४०१.ख वा ४०१.ग को १ मा गोलो लगाएको भए)***	***(खण्ड ७ मा जाने)***
प्र.नं.	**प्रश्न**	**जवाफ**	**... मा जाने**
६०१	यदि उहाँ (मृतक) को मृत्यु गर्भपतन गराउदै गर्दा वा गराए पछि भएको भए, गर्भपतन गराउन कहाँ जानु भएको थियो **?** ***[यदि स्वास्थ्य संसथामा गर्भपतन गराएको भए स्वास्थ्य संस्थाको नाम उल्लेख गर्नुहोस ?]*** _____	स्वास्थ्य चौकी.....१ प्रा.स्वा.के. .....२ सरकारी अस्पताल.....३ नीजि अस्पताल / क्लिनिक.....४ गै.स.स./मिशन अस्पताल.....५ शिक्षण अस्पताल .....६ घरैमा गरेको.....७ धामी झाक्री कहाँ.....८ औषधि पसलमा.....९ अन्य (खुलाउने) _____९६ थाहा छैन.....९८	
६०२	उहाँ (मृतक) को गर्भपतन कुन तरिकाबाट गरिएको थियो **?**	गर्भपतन गराउने औषधिको प्रयोग बाट.....१ सर्जिकल विधि (एम.भि.ए, डि.एण्ड सि, हिस्टेरोटोमी) .....२ जडिबुटी प्रयोग..... ३ गर्भ आफै खेर गएको ..... ४ अन्य (खुलाउने) _____९६ थाहा छैन.....९८	

	थियो	थिएन	थाहा छैन	जवाफ दिन नमानेको

६०३	उहाँ (मृतक) को मृत्यु गर्भपतन गराउँदा भएको थियो ?	१	२	९८	९९
६०४	उहाँ (मृतक) को मृत्यु गर्भ आफै खेर गएको वा गर्भपतन गराएको ४२ दिन भित्र भएको थियो ?	१	२	९८	९९
६०५	उहाँ (मृतक) को गर्भपतन सफल भएको थियो ?	१	२	९८	९९
६०६	उहाँ (मृतक) को गर्भपतन गरि सकेपछि अत्यधिक रक्तश्राब भएको थियो ?	१	२	९८	९९
६०७	उहाँ (मृतक) को गर्भपतन गरेपछि ४२ दिन भित्र ज्वरो आएको थियो ?	१	२	९८	९९
६०८	उहाँ (मृतक) को गर्भपतन गरेपछि ४२ दिन भित्र योनिबाट गन्हाउने पानी बगेको थियो ?	१	२	९८	९९
६०९	उहाँ (मृतक) को गर्भपतन गरेपछि अत्यधिक पेट दुखेको थियो ?	१	२	९८	९९
६१०	उहाँको गर्भपतन गराउँदा पाठेघरमा कुनै चोटपटक लागेको वा प्वाल परेको वा पाठेघर फुटेको थियो ?	१	२	९८	९९

७. प्रसुती सम्बन्धि विवरण

	[नोटः प्र. नं. ४०१ रुजु गर्नुहोस् ।] ***प्रसुति अवस्थामा मृत्यु भएको (प्र. नं. ४०१.ख वा ४०१. ग को १ मा गोलो लगाएको भए)*** ↓ ***अन्य अवस्थामा मृत्यु भएको (प्र. नं. ४०१.क वा ४०१.घ को १ मा गोलो लगाएको भए)*** → ***(खण्ड ९ मा जाने)***		
प्र.नं.	**प्रश्न**	**जवाफ**	**... मा जाने**
७०१	उहाँ (मृतक) को प्रसुती व्यथा सुरु भएको कति समय पछी बच्चा जन्मिएको थियो ?	☐☐ घण्टा थाहा छैन ९८	
७०२	उहाँ (मृतक) को प्रसुती कहाँ भएको थियो? ***[नोटः यदि स्वास्थ्य संस्थामा प्रसुती (सुत्केरी) भएको भए स्वास्थ्य संस्थाको नाम उल्लेख गर्नुहोस् ।]*** _____	स्वास्थ्य चौकी ..... १ प्रा.स्वा.के..... २ सरकारी अस्पताल .....३ नीजि अस्पताल ..... ४ गै.स.स./मिशन अस्पताल ..... ५ शिक्षण अस्पताल.....६ घरमा .....७ घरवाट स्वास्थ्य संस्था जाँदा बाटोमा.....८ एउटा स्वास्थ्य संस्थावाट अर्को स्वास्थ्य संस्था जाँदा बाटोमा..... .९ अन्य (खुलाउने) _____९६ थाहा छैन ९८	

७०३	उहाँ (मृतक) लाई प्रसुती गराउने मुख्य व्यक्तिको हुनुहुन्थ्यो ? ***(एउटा जवाफमा मात्र गोलो लगाउनुहोस्)***	डाक्टर ..... १ स्टाफनर्स/ मिडवाईफ ..... २ अनमी .....३ अन्य स्वास्थ्यकर्मी ..... ४ महिला सामुदायिक स्वास्थ्य स्वयम् सेविका .....५ साथीभाई/ सुडेनी .....६ अन्य (खुलाउने) _____९६ थाहा छैन.....९८	
७०४	उहाँ (मृतक) को कुन विधिबाट प्रसुती गराइएको थियो ? ***(एउटा जवाफमा मात्र गोलो लगाउनुहोस्)***	सामान्य . ..... १ इन्स्ट्रुमेन्टल (भ्याकुम वा फोरसेप प्रयोग गरि) .....२ उल्लटो वा जुम्ल्याहा बच्चा सहयोगमा जन्मिएको .....३ अप्रसन गरेर (सी. एस)..... ४ अन्य (खुलाउने) _____९६ थाहा छैन.....९८	

७०५	***[नोटः प्रसुति गराउँदा हुन सक्ने निम्न समस्याहरू एक एक गरी सोध्नुहोस् र उपयुक्त जवाफमा गोलो लगाउँनुहोस । यदि कुनै समस्याको जवाफ "थियो" भन्ने आएमा, कति घण्टाको लागि उक्त समस्या भएको थियो सो "अवधी: घण्टा" मा खुलाउनुहोस् ।*** उहाँ (मृतक) लाई प्रसुती गराउदा	**थियो**	**थिएन**	**थाहा छैन**	**जवाफ दिन नमानेको**	**अवधी घण्टामा**	
क	ज्वरो आएको थियो ?	१	२	९८	९९		
ख	योनीबाट गन्हाउने पानी बगेको थियो ?	१	२	९८	९९		
ग	शरीर पूरै काम्ने (फिट्स / सिजर / कन्वल्जन) भएको थियो ?	१	२	९८	९९		
घ	२४ घण्टा भन्दा लामो प्रसुती व्यथा लागेको थियो ?	१	२	९८	९९		
ङ	साल अड्किएको थियो ?	१	२	९८	९९		
च	योनिबाट अत्यधिक रगत बगेको थियो ?	१	२	९८	९९		
छ	बच्चा असामान्य अवस्था (उल्टो, छड्के आदि) मा बसेको थियो ?	१	२	९८	९९		
ज	बच्चा ज्यादै ठूलो थियो?	१	२	९८	९९		
झ	बच्चाको टाउको भन्दा पहिले हात खुट्टा वा अन्य अंग बाहिर आएको थियो ?	१	२	९८	९९		
ञ	बेहोस हुनु भएको थियो ?	१	२	९८	९९		
ट	अपरेसनको लागि बेहोस गराउदा / शरीरको कुनै भाग लठ्याउंदा समस्या भएको थियो ?	१	२	९८	९९		
ठ	अन्य (खुलाउने) _____	१	२	९८	९९		

८. सुत्केरी सम्बन्धि विवरण

	[नोटः प्र. नं. ४०१ रुजु गर्नुहोस् ।] *बच्चा जन्माएको (सुत्केरी भएको) ४२ दिनभित्र मृत्यु भएको (प्र. नं. ४०१.ग को १ मा गोलो लगाएको भए)*	*अन्य अवस्थामा मृत्यु भएको नं. ४०१.क, ४०१.ख वा ४०१.घ को १ मा गोलो लगाएको भए)* →	*(प्र. (खण्ड ९ मा जाने)*
प्र.नं.	**प्रश्न**	**जवाफ**	**... मा जाने**
८०१	यदि उहाँ (मृतक) को मृत्यु सुत्केरी पछि भएको भए सुत्केरी भएको कति दिन पछि मृत्यु भएको भएको थियो ?	☐☐ दिन थाहा छैन.....९८ जवाफ दिन नमानेको ९९	

८०२	*नोटः सुत्केरी पश्चात हुन सक्ने निम्न समस्याहरूलाई एक एक गरी सोध्नुहोस र उपयुक्त जवाफमा गोलो लगाउँनुहोस । यदि कुनै समस्याको जवाफ "थियो" भन्ने आएमा, कति दिनको लागि उक्त समस्या भएको थियो सो "अवधी: दिन" मा खुलाउनुहोस् ।* उहाँ (मृतक) **लाई सुत्केरी भए पछि**	**थियो**	**थिएन**	**थाहा छैन**	**जवाफ दिन नमानेको**	**अवधी (दिनमा लेख्ने)**	
क	योनी बाट धेरै रगत बगेको थियो ?	१	२	९८	९९		
ख	योनी बाट गन्हाउने पानि बगेको थियो ?	१	२	९८	९९		
ग	नङ, आँखाको डिल, गिंजा फुस्रो देखिएको थियो ?	१	२	९८	९९		
घ	पेट धेरै दुख्ने भएको थियो ?	१	२	९८	९९		
ङ	रिंगटा लाग्ने, मुर्छा पर्ने भएको थियो ?	१	२	९८	९९		
च	शरीर पूरै कम्पन हुने गरेको थियो ?	१	२	९८	९९		
छ	ज्वोरो आउने गरेको थियो ?	१	२	९८	९९		
ज	योनी बाट दिशा पिसाब चुहिने गरेको थियो ?	१	२	९८	९९		
झ	पाठेघर खस्ने / पाठेघर उल्टिएको थियो ?	१	२	९८	९९		
ञ	अन्य (खुलाउने) _____	१	२	९८	९९		

८०३	*[नोटः प्रोटोकलअनुसार तीन पटक सुत्केरी जाँच गराउनु भएको थियो कि थिएन सोध्नका लागि तलका प्रश्नहरू एकएक गरी सोध्नुहोस् र उपयुक्त जवाफमा गोलो लगाउनुहोस् ।]* उहाँ (मृतक) ले सुत्केरी पश्चात्.....	**थियो**	**थिएन**	**थाहा छैन**	**जवाफ दिन नमानेको**
क	२४ घण्टामा सुत्केरी जाँच गराउनु भएको थियो ?	१	२	९८	९९
ख	तेस्रो (३) दिनमा सुत्केरी जाँच गराउनु भएको थियो ?	१	२	९८	९९
ग	सातौँ (७) दिनमा सुत्केरी जाँच गराउनु भएको थियो ?	१	२	९८	९९

९. स्वास्थ्य सेवा उपयोग सम्बन्धि विवरण

महिलाको मृत्यु जुनै कारणले भएको भए पनि सबैलाई यो खण्ड सोध्नुहोस् ।

प्र. नं.	प्रश्न	जवाफ	मा जाने
९०१	उहाँ (मृतक) ले मृत्यु हुनु अघि बिरामी हुँदा स्वास्थ्य संस्था वा अन्य ठाउँमा उपचार गराउनु भएको थियो ?	थियो .....१ थिएन. .....२ थाहा छैन.....९८	→ →खण्ड १०
९०२	यदि उहाँ (मृतक) ले मृत्यु हुनु अघि बिरामी हुँदा स्वास्थ्य संस्था वा अन्य ठाउँमा उपचार गराएको भए उपचार कहाँ गराउनु भयो ? ***[यदि स्वास्थ्य संसथामा उपचार गराएको भए स्वास्थ्य संस्थाको नाम उल्लेख गर्नुहोस ?]*** _____	स्वास्थ्य चौकी .....१ प्रा.स्वा.के. .....२ सरकारी अस्पताल .....३ नीजि अस्पताल / क्लिनिक .....४ गै.स.स./मिशन अस्पताल .....५ शिक्षण अस्पताल .....६ घरमा .....७ धामी झाक्री कहाँ .....८ औषधि पसलमा .....९ अन्य (खुलाउने) _____९६ थाहा छैन.....९८	
९०३	यदि उहाँ (मृतक) ले मृत्यु हुनु अघि बिरामी हुँदा स्वास्थ्य संस्था वा अन्य ठाउँमा उपचार गराएको भए को संग उपचार गराउनु भयो ?	डाक्टर .....१ स्टाफनर्स . .....२ अनमी .....३ अन्य स्वास्थ्यकर्मी .....४ सुडेनी /साथीभाई.....५ महिला सामुदायिक स्वास्थ्य स्वयं सेविका .....६ अन्य (खुलाउने) _____९६ थाहा छैन.....d९८	
९०४	यदि उहाँ (मृतक) ले मृत्यु हुनु अघि बिरामी हुदा स्वास्थ्य संस्था वा अन्य ठाउँमा उपचार नगराएको भए उपचार किन गराउनु भएन ? (बहुउत्तर सम्भव छ)	आवश्यक नठानेर .....१ उपचार गराउनु पर्छ भन्ने थाहा नभएर.....२ स्वास्थ्य संस्था टाढा भएर.....३ खर्चको जोहो गर्न नसकेर .....४ यातायातको सुबिधा नभएर .....५ अन्य (खुलाउने) _____९६ थाहा छैन ९८	

खण्ड १०. मृत्युका कारणहरू सम्बन्धी विवरण

महिलाको मृत्यु जुनै कारणले भएको भए पनि सबैलाई यो खण्ड सोध्नुहोस् ।

१००१	***[नोटः तीन ढिलाईहरूसँग सम्बन्धीत बिभिन्न कारणहरूले मृत्यु भएको हुन सक्ने हुनाले निम्न कारणहरु एक एक गरी सोध्नुहोस र उपयुक्त जवाफमा गोलो लगाउँनुहोस ।]*** तपाईको विचारमा उहाँ (मृतक) को उपचार गर्ने सन्दर्भमा	**हो / थियो**	**होईन / थिएन**	**थाहा छैन**	**जवाफ दिन नमानेको**
क	स्वास्थ्य सबन्धि समस्या छ भन्ने पहिचान गर्न ढिलाई भएको थियो ?	१	२	९८	९९
ख	उपचार गर्ने निर्णय गर्न ढिलाई भएको थियो ?	१	२	९८	९९

ग	दक्ष वा तालिम प्राप्त स्वास्थ्य कर्मी बाहेक अन्य बाट उपचार गराएकोले ढिलाई भएको थियो?	१	२	९८	९९
घ	पैसा नभएर / पैसाको व्यवस्था गर्न ढिलाई भएको थियो?	१	२	९८	९९
ङ	यातायातको साधन नभएर / व्यवस्था गर्न ढिलाई भएको थियो?	१	२	९८	९९
च	परम्परागत रिति रिवाजले गर्दा ढिलाई भएको थियो?	१	२	९८	९९
छ	स्वास्थ्य संस्था एक्लै जान नसक्ने भएको ले ढिलाई भएको थियो?	१	२	९८	९९
ज	उपचारको लागि घरबाट अनुमति लिन ढिलाई भएको थियो?	१	२	९८	९९
झ	धेरै रात परेको ले स्वास्थ्य संस्था जान नसकेको ले ढिलाई भएको थियो?	१	२	९८	९९
ञ	अन्य (खुलाउने) _____				
१००२	अब म बिरामिको उपचार गर्ने सन्दर्भमा स्वास्थ्य संस्थासँग सम्बन्धीत कारणहरूका बारेमा केही प्रश्नहरू सोध्न चाहन्छु। तपाईको विचारमा उहाँ (मृतक) को उपचार गर्ने सन्दर्भमा	**हो / थियो**	**होईन / थिएन**	**थाहा छैन**	**जवाफ दिन नमानेको**
क	यातायातको सुविधा नभएको कारण प्रेषण (रेफर) गरेको स्वास्थ्य संस्थामा जान ढिलाई भएको थियो?	१	२	९८	९९
ख	स्वास्थ्य संस्था बीच सूचना आदान प्रदान गर्न ढिलाई भएको थियो?	१	२	९८	९९
ग	स्वास्थ्य संस्थामा भर्ना हुने बित्तिकै उपचार हुन ढिलाई भएको थियो?	१	२	९८	९९
घ	अघिल्लो स्वास्थ्य संस्थाको उपचार गर्ने क्षमता नभएकोले ढिलाई भएको थियो?	१	२	९८	९९
ङ	यो स्वास्थ्य संस्था उपचार गर्न असक्षम भएकोले ढिलाई भएको थियो?	१	२	९८	९९
च	स्वास्थ्य संस्थमा तालिम प्राप्त स्वास्थ्यकर्मीको अभाव भएकोले ढिलाई भएको थियो?	१	२	९८	९९
छ	स्वास्थ्य संस्थामा रगतको व्यवस्थापन हुन नसकेर ढिलाई भएको थियो?	१	२	९८	९९
ज	स्वास्थ्य संस्थामा आबस्यक औषधिको कमि भएर ढिलाई भएको थियो?	१	२	९८	९९
झ	स्वास्थ्य संस्थामा अत्याबस्यक उपकरणको अभाव भएकोले ढिलाई भएको थियो?	१	२	९८	९९
ञ	अन्य (खुलाउने) _____	१	२	९८	९९
१००३	के उहाँको मृत्यु कुनै तल दिईएका प्रकारहरुबाट भएको थियो ?				
क	के उहाँ आगोले वा अन्य रसायनले जल्नु वा पोलिनु भएको थियो ?	१	२	९८	९९
ख	तपाईको विचारमा के उहाँले आत्महत्या गर्नु भएको थियो ?	१	२	९८	९९
ग	के उहाँको मृत्यु सडक दुर्घटनामा भएको थियो ?	१	२	९८	९९
घ	के उहाँ लडेर घाईते हुनु भएको थियो ?	१	२	९८	९९
ङ	के उहाँको मृत्यु पानीमा डुवेर भएको थियो ?	१	२	९८	९९
च	के उहाँको मृत्यु कुनै प्रकारको जनावर वा किराले टोकेको कारणले भएको थियो ?	१	२	९८	९९
छ	के उहाँ कुनै हिंसा वा आक्रमणको शिकार हुनु भएको थियो ?	१	२	९८	९९
ज	उहाँको मृत्यु अन्य प्रकारको दुर्घटनाबाट भएको भए खुलाउनुहोस ?	_____			
झ	मृत्यु हुँदाको बखत उहाँ (मृतक) लाई कोभिड-१९ सङ्क्रमण पुष्टि भएको थियो ?	१	२	९८	९९
१००४	स्वास्थ्य कर्मीले उहाँको मृत्यु के कारणले भएको हो भनेर भन्नु भयोको थियो ?	१	२	९८	९९

१००५	उहाँको मृत्यु अस्पतालमा भएको भए मृत्यु प्रमाण पत्र दिईएको छ ?	१	२	९८	९९
१००६	***नोट: यदि मृत्यु प्रमाण पत्र उपलब्ध भए प्रमाण पत्रमा लेखिए अनुसार मृत्युको कारण लेख्नुहोस:***	_____			

खण्ड ११. जोखिमयुक्त व्यवहार

११०१	के वहाले तल दिईएका कुनै स्वास्थ्य सम्बन्धि व्यवहारहरु गर्नुहुन्थ्यो ?				
क	के उहाँले मध्यपान (रक्सि, छयांग, जाँड, आदि) गर्नुहुन्थ्यो ?	१	२	९८	९९
ख	के उहाँले सुर्ति जन्य पदार्थ (चुरोट, सिगार, पाईप, खैनी आदि) पिउनुहुन्थ्यो / सेवन गर्नुहुन्थ्यो ?	१	२	९८	९९
११०२	के उहाँले लागु औषध सेवन गर्नुहुन्थ्यो ?	१	२	९८	९९

प्रश्नावली भर्ने व्यक्तिको विवरण			
१. नाम र थर: _____			
२. पद: _____			
३. कार्यालयको नाम: _____			
४. प्रश्नावली भरेको मिति	गते	महिना	साल
५. दस्तखत:			

प्रश्नावली समिक्षा गर्ने व्यक्तिको विवरण			
१. नाम र थर: _____			
२. पद: _____			
३. कार्यालयको नाम: _____			
४. प्रश्नावली समिक्षा गरेको मिति	गते	महिना	साल
५. दस्तखत:			

SN	Ethnicity	Code
1	Dalit	01
2	Disadvantaged Janajatis	02
3	Terai Madhesi Caste group	03
4	Muslim/Churoute	04
5	Relatively advantaged Janajatis	05
6	Upper Caste groups	06

MATERNAL DEATH CAUSE OF DEATH ASSIGNMENT FORM
(Use ICD-MM to classify Maternal Deaths)

A. Case Summary:			
District		**Case Number**	
Name of the deceased		**Age (Completed years)**	

Case narrative: ***[Gravida, Parity, ANC/Intra/PNC history, sequence of events, treatment, time line of events]***

History of illness before death

Positive symptoms

-
-

Contributing factors (delays)

First delay	**Second delay**	**Third delay**
• •	• •	• •

Cause of Death Assignment

Part I		Approximate Interval Between Onset & Death
Disease or condition directly leading to the death*	a) _____ (due to or as a consequence of)	
Antecedent causes (Morbid conditions, if any, giving rise to the above cause, *stating underlying condition last)*	b) _____ (due to or as a consequence of)	
	c) _____ (due to or as a consequence of)	
	d) _____ (due to or as a consequence of)	

Part II	
Other significant conditions (morbid conditions contributing to death, but not related to the disease or conditions causing it)	

* This does NOT mean the mode of dying, e.g., heart failure, respiratory failure; it means the disease, injury or complication that caused death.

Information about cause of death assignment (√)

Certainty of Diagnosis	1. [High]	2. [Medium]	3. [Low]	4. [Insufficient to Code]

Insufficient information: What other information should have been gathered?			
Name of the reviewer who assigned the cause of death		Contact No.	
Date of review	DD / MM / YYYY	Start time	Finish time

The woman was: √

☐ pregnant at the time of death

☐ in labour at the time of death

☐ had delivered within 42 days, **at the time of death**

☐ had an abortion within 42 days, **at the time of death**

ICD MM Classification (Groups 1-9): _____

ACTION PLAN (To be decided by the MPDSR Committee)

Avoidable factors identified during review	Action to be taken for the avoidable factors	Responsible person/ Dept/ Org	Timeline for the action to be completed	To be monitored by	Remarks
			DD / MM / YYYY		
			DD / MM / YYYY		
			DD / MM / YYYY		

Committee members:

SN	Name	Designation	Institution/ Dept	Phone	Signature

Annex 5.

MPDR Forms

MPDSR Tool 4

Government of Nepal
Ministry of Health and Population
Department of Health Services
Family Welfare Division
Teku, Kathmandu

CONFIDENTIAL
This form will be kept confidential and used only for quality of care improvement and statistical purposes and not for medicolegal purposes

Maternal Death Review Form

Maternal death includes death of a woman while pregnant or within 42 days of termination of pregnancy, regardless of the site or duration of pregnancy, from any cause related to or aggravated by pregnancy or its management, but not from accidental or incidental causes (WHO ICD-10). *However, MPDSR should include review of all pregnancy related deaths.*

The maternal death review process is an in-depth investigation of the causes of and circumstances surrounding maternal deaths occurring at health facilities with the objective of identifying avoidable factors and utilizing the information for improving quality of care at the facility, and policy and programme reform.

Sections 1-7 should be completed within 24 hours of a maternal death by the attending medical officer/nursing staff in consultation with staff that had contact with the deceased. All available records related to the deceased should be reviewed. The death should be notified to local level / Health Office / Province / Centre (FWD) via phone, email, etc. within 24 hours of occurrence with name, age and current address of the deceased.

Sections 1-7 should be reviewed within ***72 hours by a hospital Maternal Death Review Committee***. After discussion, the committee should review section 7 and complete Section 8. The completed forms should be made accessible to Family Welfare Division through web entry.

SECTION 1: DETAILS OF DECEASED WOMAN

101	**Full name:**	**101 a. Hospital ID:**
102	**Age at death (Completed years)**	**Years**
103	**Current address:** **District:** _____ **Local level:** _____ **Ward number:** **Contact number:**	
104	**Ethnicity:** _____ ***(Write '98' if 'Don't know')***	**Code:** ***(Refer to Annex for Ethnicity code)***
105	**Gravida**	
106	**Parity**	
107	**Date of death (Nepali date)**	**Day** **Month** **Year**

District: Local level:

108	Time of death (12 hour form)	☐☐ : ☐☐ AM / PM Hour Minute	
109	Period of death	Antenatal period *(Skip section 4)*	1
		Intrapartum period (during labor)	2
		Postpartum period upto 24 hours after delivery	3
		Postpartum period 24 to 48 hours after delivery	4
		Postpartum period after 48 hours of delivery	5
		Abortion related (< 28 weeks of pregnancy)	6
110	Was the patient BROUGHT DEAD to this facility	Yes	1
		No	2

SECTION 2: ADMISSION RELATED INFORMATION (AT INSTITUTION WHERE DEATH OCCURRED)

201	Date of admission to this facility (Nepali date)	☐☐ ☐☐ ☐☐☐☐ Day Month Year	
202	Time of admission (12 hour format)	☐☐ : ☐☐ AM / PM Hour Minute	
203	Period on admission	Antepartum period	1
		Intrapartum period (during labor)	2
		Postpartum period upto 24 hours after delivery	3
		Postpartum period 24 to 48 hours after delivery	4
		Postpartum period after 48 hours of delivery	5
		Abortion related (< 28 weeks of pregnancy)	6
203a	If the patient was referred, where was she referred from?	Name of facility (Specify): _____	
203b	Date of referral	☐☐ ☐☐ ☐☐☐☐ Day Month Year	
203c	What time was she referred? (12 hour format)	☐☐ : ☐☐ AM / PM Hour Minute	

204	Condition / Vital signs at admission	Pulse/min	Temp ^{0} F	BP (Syst)	BP (Dias)	Respiration/min
205	Provisional diagnosis at the time of admission *(Specify in BLOCK LETTERS)*	_____				

SECTION 3: CURRENT PREGNANCY

301	Antenatal care visits during this pregnancy?	8 visits as per National protocol	8+	6-7	4-5	3	2	1	No visits	Don't know

302	If she had ANC visits, when did she have her first ANC? (Specify weeks OR completed month of pregnancy)	Weeks	☐☐
		Months	☐☐
		Don't know	98
302a	When did she have her last ANC?	Weeks	☐☐

	(Specify weeks OR completed month of pregnancy)	Months	☐☐
		Don't know	98
303	Any complications DURING this pregnancy? *(Specify in BLOCK LETTERS)*	_____	

SECTION 4: DELIVERY AND PUERPERIUM

401	Date of delivery (Nepali date)	☐☐ ☐☐ ☐☐☐☐ Day Month Year	
402	Time of delivery (12 hour format)	☐☐ : ☐☐ AM / PM Hour Minute	
402a	Gestational age at delivery	☐☐ weeks	
403	Where did she deliver? *(Select only ONE response)*	This health facility	1
		Other health facility	2
		In transit from one health facility to another health facility	3
		In transit from home to health facility	4
		Home	5
403a	Type of facility *(Select only ONE response)*	Public Hospital	1
		Private / NGO / Missionary Hospital	2
		Medical college / Teaching Hospital	3
		Others (Specify) _____	96
		Don't know	98

404	Is this facility BC/BEONC/CEONC? *(Select only ONE response)*	Birthing Centre	BEONC	CEONC
		1	2	3

405	Who was the main delivery attendant?	Doctor	1
		Nurse / Midwife / ANM	2
		Other health workers (Specify)_____	3
		Others (specify)_____	96
406	Was partograph used during delivery?	Yes	1
		No	2
		Don't know	98
407	Was the pregnancy Single or Multiple?	Single	1
		Multiple	2

408	What was the TOTAL duration of labor?	Not in labor	<12 hrs	12-23 hrs	≥24 hrs	Don't know
		1	2	3	4	98

409	Presentation of fetus	Cephalic	1
		Breech	2
		Shoulder	3
		Others (Specify) _____	96
410	What was the mode of delivery?	Vaginal Delivery *(Go to 413)*	1
		Assisted Vaginal Delivery (Breech, Multiple)	2

		Instrumental Delivery (Vacuum, Forceps)		3
		Caesarean Section		4
		Others (Specify)_____		96
411	What was the reason for Assisted/Instrumental delivery / LSCS ?	Maternal	Fetal	Don't Know
		1	2	98
412	Was the Caesarean Section emergency or elective? (ask only if Q410=4)	Emergency	Elective	Don't Know
		1	2	98
413	Any apparent complications DURING LABOR or DELIVERY? *(Specify in BLOCK LETTERS)*	_____		

414	Outcome of this pregnancy	Alive	Induced/ spontaneous abortion	Macerated Still Birth	Fresh Still Birth	Early NND (upto 7 days)	Late NND (7-28 days	Infant death (28-42 days)	Don't Know
		1	2	3	4	5	6	7	98

415	Any apparent complications AFTER delivery? *(Specify in BLOCK LETTERS)*	_____

SECTION 5: INTERVENTIONS

501	Were any of the following emergency interventions administered? (Select all that is appropriate)									
		Antenatal			Intrapartum			Postpartum		
		Yes	No	DK	Yes	No	DK	Yes	No	DK
a	Blood transfusion	1	2	98	1	2	98	1	2	98
b	Hysterectomy / operative intervention	1	2	98	1	2	98	1	2	98
c	Exploration of uterus / MRP	1	2	98	1	2	98	1	2	98
d	Laparotomy	1	2	98	1	2	98	1	2	98
e	ICU/Advanced life support	1	2	98	1	2	98	1	2	98
F	MgSO4	1	2	98	1	2	98	1	2	98
G	Uterotonics (Specify) _____	1	2	98	1	2	98	1	2	98
H	Antibiotics	1	2	98	1	2	98	1	2	98
I	Treatment of thrombosis	1	2	98	1	2	98	1	2	98
J	Others (Specify)_____	1	2	98	1	2	98	1	2	98

SECTION 6: Medical Cause of Death Assignment

PART I: Case narrative: [Gravida, Parity, ANC/Intra/PNC history, sequence of events, treatment, time line of events] ***(WRITE IN BLOCK LETTERS)***

Please write a short history of what happened prior to admission

Any complications/significant findings during pregnancy:

Reason for hospital admission:

PART II: History of illness prior to death
Findings during admission: ***Events during hospital stay***   ***Events that occurred before death:***

Contributing factors (Delays)	
First delay	
Second delay	
Third delay	

Cause of Death Assignment		
Part I		**Approximate Interval Between Onset & Death**
Disease or condition directly leading to the death* ***(Final / Immediate Cause of Death)***	a) _____ ***(due to or as a consequence of)***	
Antecedent causes ***(Morbid conditions, if any, giving rise to the above cause, stating underlying condition last)*** **Note: State the underlying condition in the last space and state the sequence of events as you move up, stating the final cause of death in the top-most space (a)**	***b)*** _____ ***(due to or as a consequence of)***	
	c) _____ ***(due to or as a consequence of)***	
	d) _____ ***(due to or as a consequence of)***	
Part II		
Other significant conditions (morbid conditions contributing to death, but not related to the disease or conditions causing it) ***(Contributing factors)***	_____ ___	

* This does NOT mean the mode of dying, e.g., heart failure, respiratory failure; it means the disease, injury or complication that caused death.
The woman was: √ ☐ pregnant at the time of death ☐ was in labour at the time if death ☐ had delivered within 42 days, at the time of death ☐ had an abortion within 42 days, at the time of death

Section 7: ICD-MM Classification (To be done by the Hospital MPDSR Committee)

a	Pregnancy with abortive complications (Direct Maternal Death)	ICD-MM 1
b	Hypertensive disorders of pregnancy (Direct Maternal Death)	ICD-MM 2
c	Obstetric Hemorrhage (Direct Maternal Death)	ICD-MM 3
d	Pregnancy related infections (Direct Maternal Death)	ICD-MM 4
e	Other obstetric complications (Direct Maternal Death)	ICD-MM 5
f	Unanticipated complications of management (Direct Maternal Death)	ICD-MM 6
g	Non-Obstetric complications (Indirect Maternal Death)	ICD-MM 7
h	Unknown, Undetermined cause (Indirect Maternal Death)	ICD-MM 8
i	Coincidental Cause	ICD-MM 9

SECTION 8: RESPONSE PLAN IN THE HOSPITAL (To be done by the Hospital MPDSR Committee)

Avoidable factors identified during review	Action to be taken for the avoidable factors	Responsible person / Dept/ Org	Timeline for the action to be completed	To be monitored by	Remarks
			DD / MM / YYYY		
			DD / MM / YYYY		
			DD / MM / YYYY		

Note: The request for necessary action at the community level has to be sent formally through Local level.

Attendance in MPDSR Committee Meeting

SN	Name	Designation	Institution/ Dept	Phone	Signature

Date of form filled by case attending staff (Nepali date)	☐☐ ☐☐ ☐☐☐☐ **Day Month Year**
Date of review by facility MPDSR committee (Nepali date)	☐☐ ☐☐ ☐☐☐☐ **Day Month Year**

Staff who completed this review form:

Name: _____ **Designation:**_____

Phone Number:_____ **Signature:** _____

Thank You

S.N	Ethnicity	Code		S.N	Ethnicity	Code
1	Dalit	01		4	Muslim/Churoute	04
2	Disadvantaged Janajatis	02		5	Relatively advantaged Janajatis	05
3	Terai Madhesi Caste Group	03		6	Upper Caste groups (Brahmin/Chhetri/Thakuri/Sanyasi/ Terai Brahmin/ Rajput/ Kayastha / Marwadi)	06

ICD-MM Reference Aid

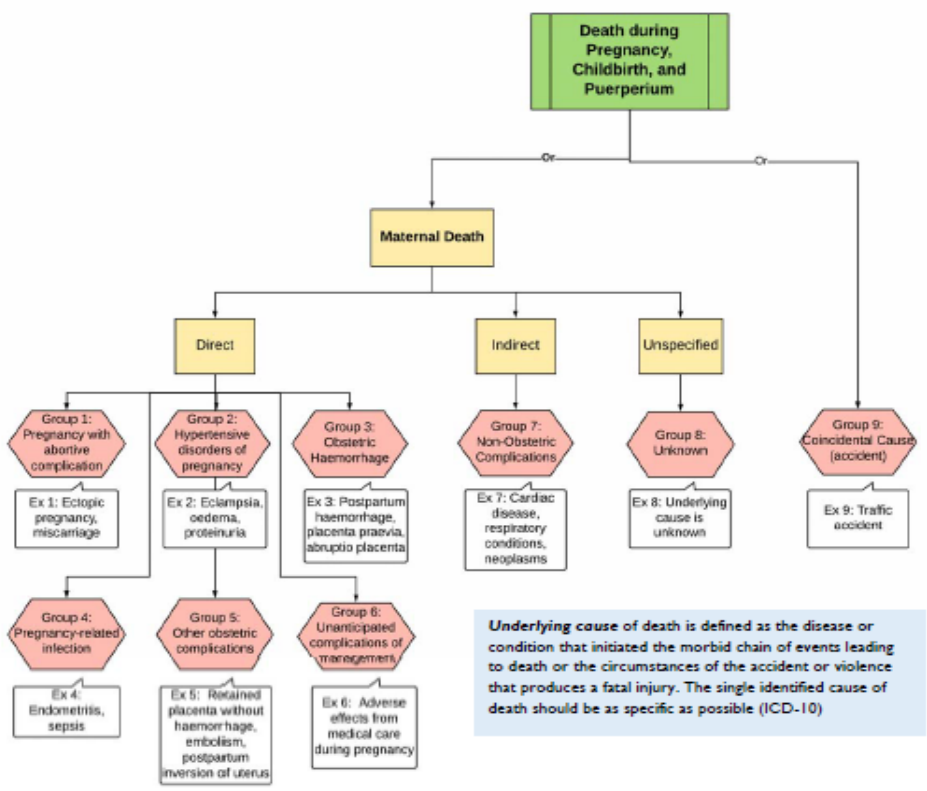
Groups of the Underlying Cause of Death during Pregnancy, Childbirth, and Puerperium

Definitions of deaths

Death occurring during pregnancy, childbirth and the puerperium is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the cause of death.

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

Late maternal death
A late maternal death is the death of a woman from direct or indirect causes more than 42 days but less than one year after termination of pregnancy.



Underlying cause of death is defined as the disease or condition that initiated the morbid chain of events leading to death or the circumstances of the accident or violence that produces a fatal injury. The single identified cause of death should be as specific as possible (ICD-10)

MPDSR Tool 5

Government of Nepal
Ministry of Health and Population
Department of
Health Services
Family Welfare
Division
Teku, Kathmandu

Perinatal Death Review Form

CONFIDENTIAL
This form will be kept confidential and used only for quality of care improvement and collective statistical purposes and not for medicolegal purposes

Perinatal deaths include death of a baby from 28 weeks of gestation (or baby weighing at least 1000 grams) to first 7 days of life (early neonatal period).
The perinatal death review process is an in-depth investigation of the causes of and circumstances surrounding late fetal and early neonatal deaths occurring at health facilities with the objective of identifying avoidable factors and utilizing the information for improving quality of care at the facility, and policy and program reform across the country.
Personal identifiable information in this form will be kept confidential and will be grouped and non- identifiable. Information and discussion arising from this review form cannot be used in legal proceedings.
Sections 1-4 should be completed within 72 hours of the perinatal death by the attending doctors / nursing staff in consultation with other staff who had contact with the mother/infant. All available records related to the deceased should be reviewed.
PDR Summary form should be filled for monthly death review and action plan developed by the hospital MPDSR Committee. The completed PDR summary forms should be made accessible to Family Welfare Division through web-based data entry.

SECTION 1: DETAILS OF MOTHER OF THE DECEASED

101	**Name of the mother:** _____	**101 a. Hospital ID:** ☐☐☐☐☐☐☐☐ *(**Enter mother's ID, but** If baby was admitted in this hospital, enter baby's ID)*
102	**Current address:** **District:** _____ ☐☐ **Local level:** _____ ☐☐☐ **Ward number:** ☐☐ **Contact number:** ☐☐☐☐☐☐☐☐☐☐	
103	**Date of admission (Nepali date)** ***(If baby was delivered in this hospital)***	☐☐ ☐☐ ☐☐☐☐ **Day** **Month** **Year**
104	**Time of admission (12 hour format)** ***(If baby was delivered in this hospital)***	☐☐ : ☐☐ **AM / PM** **Hour** **Minute**

105	Ethnicity (Specify)_____	Code: ☐☐ *(Refer to Annex for ethnicity codes)*	
106	Maternal age in completed years *(Write '98' if Don't Know)*	Years: ☐☐	
107	Gravida: ☐☐ *(Write '98' if Don't Know)*	108	Parity: ☐☐ *(Write '98' if Don't Know)*
109	Did she receive any Antenatal care during this pregnancy?	Yes	1
		No *(Go to 111)*	2
		Don't Know *(Go to 111)*	3
110	If yes, did she have her ANC as per National protocol	Yes	1
		No	2
		Don't Know	98
111	Did she have any perinatal deaths during her previous pregnancies?	Yes	1
		No	2
		Don't Know	98
112	If yes, specify the number of previous perinatal deaths	☐☐	
113	Any co-existing maternal conditions	No maternal condition present / identified	1
		Diabetes	2
		Hypertension	3
		Hypo/Hyperthyroidism	4
		Severe anemia	5
		Other Chronic illness	6
		Others (Specify)_____	96
114	Obstetric condition of mother at admission	Not in labor	1
		Latent phase of labor	2
		Active phase of labor	3
		Third stage of labor	4
		Post-partum	5
115	Provisional diagnosis of mother at the time of admission (Specify in BLOCK LETTERS)	_____	
116	Place of delivery (Specify in BLOCK LETTERS)	_____	
117	Mode of delivery	Vaginal delivery *(Go to 119)*	1
		Vacuum	2
		Forceps	3
		Breech	4
		Caesarean Section	5
		Destructive operation	6

		Others (Specify)_____	96
118	If other than vaginal delivery, specify the main reason (Specify in BLOCK LETTERS)	_____	
119	Condition of baby at birth	Normal	1
		Asphyxiated	2
		Stillborn	3
		Others (Specify)_____	96

SECTION 2: DETAILS OF THE BABY

201	Gestational age	Weeks: ☐☐	Days: ☐☐	
202	Birth weight (in grams)	☐☐☐☐ Grams		
203	Sex of the baby	Male	Female	Ambiguous
		1	2	3
204	Singleton or multiple birth	Singleton		1
		Multiple		2
		Baby number: _____		
205	Date of delivery *(Nepali date)*	☐☐ Day ☐☐ Month ☐☐☐☐ Year		
206	Time of delivery *(12 hour format)*	☐☐ : ☐☐ AM / PM Hour Minute		
207	Type of death	Fetal Death *(Go to 210)*		1
		Early Neonatal Death (within first 7 days of birth)		2
208	If Early Neonatal Death (ENND), Date of death *(Nepali date)*	☐☐ Day ☐☐ Month ☐☐☐☐ Year		
209	If Early Neonatal Death (ENND), Time of death *(12 hour format) (Go to 301)*	☐☐ : ☐☐ AM / PM Hour Minute		
210	If Fetal death, type of death	Antepartum fetal death (Macerated)	Intrapartum fetal death (Fresh Still birth)	
		1	2	
211	If Fetal death, was Fetal Heart Sound (FHS) present when mother was admitted	Yes		1
		No		2

SECTION 3: CLINICAL INFORMATION OF DECEASED BABY

301	Relevant events summary for fresh still birth and neonatal deaths *[please write about the complication, diagnosis, investigations, procedures, IV therapy and drugs]* (If

	delivered at this hospital, labor and newborn management; if new admission, condition and management on and after admission)				
Date	**Time**	**Gestational / Postnatal age**	**Events**		
	Type of Delays		**Avoidable factors**		
302	**Delay 1: Delay in deciding to seek care** ***(Multiple Response)***		**Unaware of the warning signs**		**1**
			Lack of decision to go to health facility		**2**
			Did not know where to go to seek health care		**3**
			Reliant on traditional practice / medicine		**4**
			Had no one to take care of other children		**5**
			Financial constraints		**6**
			Others (Specify) _____		**96**
303	**Delay 2: Delay in reaching health care facility** ***(Multiple Response)***		**Unavailability of transport**		**1**
			Transport too expensive		**2**
			No facility within reasonable distance		**3**
			Lack of road access		**4**
			Others (Specify) _____		**96**
304	Delay 3: Delay in receiving appropriate treatment / management ***(Multiple Response)***		**Delayed arrival from referring facility**		**1**
			Delay in providing appropriate intervention		**2**
			Lack of appropriate intervention		**3**
			Lack of medicine, equipment and supplies		**4**
			Absence of trained human resource		**5**
			Lack of inter- department communication		**6**
			Poor documentation		**7**
			Others (Specify)_____		**96**
305	**Factors relating to referral system** ***(Multiple Response)***		**Lack of effective communication from referring facility**		**1**
			Delayed transfer of patients to appropriate treatment centre		**2**
			Unable to refer due to:		
			- **Financial constraints**		**3**
			- **Lack of transportation**		**4**
			- **Patient party's denial for referral**		**5**
			- **Others (Specify)_____**		**96**

SECTION 4: CAUSE OF DEATH

403	**ICD-PM Classification of death**		
403a	**Fetal death main cause – Antepartum Death (A- Antepartum Deaths)**	**Congenital malformations, Deformation, Chromosomal abnormalities**	**A1**
		Infection	**A2**
		Antepartum Hypoxia	**A3**
		Other specified Antepartum disorders	**A4**
		Disorders related to fetal growth	**A5**
		Antepartum death of unspecified cause	**A6**
403b	**Fetal death main cause – Intrapartum Deaths (I- Intrapartum Deaths)**	**Congenital malformations, Deformation, Chromosomal abnormalities**	**I1**
		Birth trauma	**I2**
		Acute Intrapartum event	**I3**
		Infections	**I4**
		Other specified Intrapartum disorders	**I5**
		Disorder related to Fetal growth	**I6**
		Intrapartum death of unspecified cause	**I7**
403c	**Fetal death main cause – Neonatal Deaths (N- Neonatal Deaths)**	**Congenital malformations, Deformation, Chromosomal abnormalities**	**N1**
		Disorder related to fetal growth	**N2**
		Birth trauma	**N3**
		Complications of intrapartum events	**N4**
		Convulsions and disorders of cerebral status	**N5**
		Infections	**N6**
		Respiratory and cardiovascular disorders	**N7**
		Other neonatal conditions	**N8**
		Low birth weight and prematurity	**N9**
		Miscellaneous	**N10**
		Neonatal death of unspecified cause	**N11**
403d	**Maternal Conditions associated with fetal death (M- Maternal Conditions)**	**Complications of placenta, cord and membrane**	**M1**
		Maternal complications of pregnancy	**M2**
		Other complications of labor and delivery	**M3**
		Maternal medical and surgical conditions; Noxious influences	**M4**
		No maternal condition identified (Healthy mother)	**M5**

404 ICD-PM Classification of death	_____

Date of form filled by case attending staff (Nepali date)	☐☐ ☐☐ ☐☐☐☐ Day Month Year

Staff who completed this review form:

Name:_____ **Designation:**_____

Thank You

S.N	Ethnicity	Code		S.N	Ethnicity	Code
1	Dalit	01		4	Muslim/Churoute	04
2	Disadvantaged Janajatis	02		5	Relatively advantaged Janajatis	05
3	Terai Madhesi Caste Group	03		6	Upper Caste groups (Brahmin/Chhetri/Thakuri/Sanyasi/ Terai Brahmin/ Rajput/ Kayastha / Marwadi)	06

Government of Nepal
Ministry of Health and Population
Family Welfare Division
Teku, Kathmandu

MPDSR Tool 6

This form will be kept confidential and used only for quality of care improvement and statistical purposes and not for medicolegal

Summary of Hospital Perinatal Death Review Form

Name of facility: _____ **District:** _____ **Local level:** _____

1. Report for:

MM	YY

2. Maternal Deaths: _____

3. Total Deliveries: _____ **4. Total live Births:** _____ **5. Total Multiple births:** _____

6. Still Births (SB):

Macerated SB	Fresh SB (FHS present when mother	Fresh SB (FHS absent when mother	Total Still Births

7. Early NND:

ENND ≤ 1 day	ENND > 1 day	Total ENND

8. Total perinatal Deaths (SB + ENND):

Total Perinatal Deaths

9. Birth Weight (Gms):

<1000 gms	1000-1500 gms	1501-2499 gms	2500-4000 gms	>4000 Gms	Unknown

10. Gestational Age (weeks):

<28 weeks	28-32 weeks	33-36 weeks	37-41 weeks	>=42 weeks	Unknown

11. Delivered at:

This facility	Other facility	Home	On the way	Unknown

12. Maternal age (Yrs):

<20 yrs	20-35 yrs	>35 yrs	Unknown

13. Antenatal care:

No ANC	ANC as per National Protocol	ANC NOT as per National Protocol	Unknown

14. Pregnancy:

Single	Multiple

15. Co-existing Maternal Condition:

Yes	No

16. Sex of Babies:

Male	Female	Ambiguous

17. Ethnicity:

Dalit	Disadvantaged	Terai Madhesi	Muslim/churoute	Relatively advantaged janajati	Upper caste (Brahmin / Vhhetri)

18. ICD-PM classification of death

	Complications of placenta, cord and membranes (M1)	Maternal complications of pregnancy (M2)	Other complications of labor and delivery (M3)	Maternal medical and surgical conditions; Noxious influences (M4)	No maternal condition identified (Healthy mother) (M5)	Other	Total
Antepartum Death (A)							
Congenital malformations, Deformations and Chromosomal abnormalities (A1)							
Infection (A2)							
Antepartum Hypoxia (A3)							
Other specified Antepartum disorder (A4)							
Disorders related to fetal growth (A5)							
Antepartum death of unspecified cause (A6)							
Intrapartum death (I)							
Congenital malformations, Deformations and Chromosomal abnormalities (I1)							
Birth trauma (I2)							
Acute Intrapartum event (I3)							
Infections (I4)							
Other specified Intrapartum disorder (I5)							
Disorders related to Fetal growth (I6)							
Intrapartum death of unspecified cause (I7)							
Neonatal death (N)							
Congenital malformations, deformations and chromosomal abnormalities (N1)							

Disorders related to fetal growth (N2)							
Birth trauma (N3)							
Complications of intrapartum events (N4)							
Convulsions and disorders of cerebral status (N5)							
Infections (N6)							
Respiratory and cardiovascular disorders (N7)							
Other neonatal conditions (N8)							
Low birth weight and prematurity (N9)							
Miscellaneous (N10)							
Neonatal death of unspecified cause (N11)							

19. Avoidable factors according to three delay model

Delay 1: Delay in deciding to seek care ***(Multiple Response)***	**Unaware of the warning signs**	
	Lack of decision to go to health facility	
	Did not know where to go to seek health care	
	Reliant on traditional practice / medicine	
	Had no one to take care of other children	
	Financial constraints	
	Others (Specify) _____	
Delay 2: Delay in reaching health care facility ***(Multiple Response)***	**Unavailability of transport**	
	Transport too expensive	
	No facility within reasonable distance	
	Lack of road access	
	Others (Specify) _____	
Delay 3: Delay in receiving appropriate treatment / management ***(Multiple Response)***	**Delayed arrival from referring facility**	
	Delay in providing appropriate intervention	
	Lack of appropriate intervention	
	Lack of medicine, equipment and supplies	
	Absence of trained human resource	
	Lack of inter- department communication	
	Poor documentation	
	Others (Specify)_____	
Factors relating to referral system ***(Multiple Response)***	**Lack of effective communication from referring facility**	
	Delayed transfer of patients to appropriate treatment centre	
	Unable to refer due to:	
	Financial constraints	
	Lack of transportation	
	Patient party's denial for referral	
	Others (Specify)_____	

20. Action plan for reducing perinatal deaths:

Avoidable factors identified during review	Action to be taken	Responsible person/dept/ org	Timeline (Date)	To be monitored by	Remarks
			_ _/_ _/_ _ _ _ DD MM YYYY		
			_ _/_ _/_ _ _ _ DD MM YYYY		
			_ _/_ _/_ _ _ _ DD MM YYYY		
			_ _/_ _/_ _ _ _ DD MM YYYY		
			_ _/_ _/_ _ _ _ DD MM YYYY		

List of participants in monthly MPDSR review meeting:

SN	Name	Position	Phone	Signature

Date of review by facility MPDSR committee (Nepali date)	☐☐ ☐☐ ☐☐☐☐

Annex 6.

HMIS Caste ethnicity Codes

कोड	समूह		
१	दलित	पहाड	१. बिश्वकर्मा (कामि, सुनार, ओड़, चुनँरा, पार्की, टमटा), २. परियार (दमाई, दर्जी, सुचिकार, नगर्ची, ढोली, हुडरके), ३. सार्की, (मिजार, चर्मकार, भुल), ४. गन्धर्व, ५. बादी.
		तराई	६. कलर, ७. ककैहिया, ८. कोरी, ९. खटिक, १०. खत्वे (मण्डल, खड्ग), ११. चमार (राम, मोची, हरिजन, रविदास), १२. चिडिमार, १३. डोम (मरिक), १४. तत्मा (ताती, दास), १५. दुसाध (पासवान, हजरा), १६. धोबी (रजक, हिन्दु), १७. पत्थरकट्टा, १८. पासी, १९. वाँतर, २०. मुसहर, २१. मेस्तर (हलखोर), २२. सरभङ्ग (सरवरिया), २३. सोनार, २४. लोहार, २५. नटवा
२	पहुँच नभएका जनजाति	पहाड	१. शेर्पा, २. भोटे, ३. थकाली, ४. व्याँसी, ५. वालुङ, ६. छैरोतन, ७. डोल्पो, ८. ताङवे, ९. तिन्गाउँले थकाली, १०. तोप्केगेल, ११. बाह्रगाउँले थकाली, १२. मार्फाली थकाली, १३. मुगाली, १४. ल्होपा, १५. ल्होमी (शिङसावा), १६. सियार (चुम्बा), १७. थुदाम, १८. मगर, १९. तामाङ, २०. नेवार, २१. राई, २२. गुरुङ, २३. लिम्बु, २४. भुजेल, २५. सुनुवार, २६. चेपाङग, २७. थामी, २८. याख्खा, २९. पहरी, ३०. छन्त्याल, ३१. जिरेल, ३२. दुरा, ३३. लेप्चा, ३४. हायु, ३५. ह्योल्मो, ३६. कुश्बाडिया, ३७. कुशुण्डा, ३८. फ्री, ३९. वनकरिया, ४०. बारामो/बारामु, ४१. लार्के, ४२. सुरेल, ४३. कुमाल, ४४. माझी, ४५. दनुवार, ४६. दराई, ४७. बोटे, ४८. राजी, ४९. राउटे
		तराई	५०. थारु, ५१. धानुक, ५२. राजबंशी (कोच), ५३. सतार (सन्थाल), ५४. झाँगड, ५५. गनगाई, ५६. धिमाल, ५७. ताजपुरिया, ५८. मेछे (बोडो), ५९. किसान
३	तराई मधेशी		१. यादव, २. तेली, ३. कलयार, ४. सुढी, ५. कोइरी, ६. कुर्मी, ७. कानु, ८. हलुवाई, ९. हजाम/ठाकुर, १०. बढही, ११. राजभर, १२. केयट, १३. मल्लाह, १४. नुनिया, १५. कुम्हार, १६. कहर, १७. लोध, १८. विड/ विण्डा, १९. गडेरी/ भेडीहयार, २०. माली, २१. कामर, २२. धुनिया, २३. वराय, २४. मुण्डा, २५. बडाइ, २६. पन्जावी, २७. बंगाली, २८. अमात, २९. कथावानीया, ३०. राज्धोब, ३१. कुशवाहा
४	मुस्लिम		१. मुस्लिम, २. चुरौटे
५	तुलनात्मक रुपले पहुँच भएका जनजाति		१. नेवार २. थकाली ३. गुरुङ
६	उपल्लो जातिय समूह		१. ब्राह्मण, २. क्षेत्री (पहाड) ३. ठकुरी ४. सन्यासी/दशनामी ५. तराई ब्राह्मण ६. राजपुत ७. कायस्थ ८. मारवाडी ९. जैन १०. बानिया ११. नुराङ १२. बंगाली

Annex 7.

Hospital Monitoring check-list

Maternal and Perinatal Death Surveillance and Response Activities at Hospitals

Name of hospital: Address:

Date of supervision: MM / YYYY to MM / YYYY

SN	Requirements	Yes	No	Remarks
1.	**MPDSR Committee**			**Number of meetings conducted:**
2.	**Data**			
	Total deliveries			**Number:**
	Total live births			**Number:**
	Total maternal deaths			**Number:**
	Total still births			**Number:**
	Total early neonatal deaths (upto 7 days after birth)			**Number:**
3.	**Maternal Death Review**			
	MDR Form filled within 24 hours of all maternal deaths			**Number:**
	MPDSR Review committee meeting within 72 hours of each maternal death			**Number:**
	Action Plans developed after each maternal death review			**Number:**
	Action Plans implemented after each maternal death review			**Number:**
	Action plan followed up in next MPDSR review meeting			**Number:**
4.	Perinatal Death Review			
	PDR Form filled within 72 hours of all stillbirths and early neonatal deaths			**Number:**
	Monthly MPDSR Review committee meeting to review perinatal deaths			**Number:**
	Action Plans developed after each monthly perinatal death review			**Number:**
	Action Plans implemented after monthly perinatal death review			**Number:**
	Action plans followed up in next Monthly meeting			**Number:**
5.	**Reporting**			
	MDR forms entered in web-based system			**Number:**
	PDR Summary forms entered in web-based system			**Number:**
6.	**Logistics**			
	MPDSR Guideline			
	MDR form			
	PDR form			
	PDR summary form			

Indicators required:

a.

b.

c.

d.

Issues identified:

a.

b.

c.

d.

e.

Actions advised:

a.

b.

c.

d.

e.

Lessons learned:

a.

b.

c.

d.

e.

Supervisor's
Full name:
Post:
Health facility:

Annex 8.

Monitoring check-list

Maternal and Perinatal Death Surveillance and Response Activities at Local level

Name of Local level: Address:

SN	Requirements	Yes	No	Remarks
1.	**MPDSR Committees at Health Facility**			
2.	**FCHV orientation on MPDSR**			
	Data (FY …… / ……)			
1.	Total deaths notified			**Number:**
2.	Total deaths screened			**Number:**
3.	Total pregnancy-related deaths identified			**Number:**
4.	Total VA conducted			**Number:**
5.	Cause of death identified from VA			**Number:**
6.	Cause of deaths			**a.** **b.** **c.** **d.** **e.**
7.	Local level MPDSR Committee meeting conducted			**Number:**
8.	Action plans developed after review meeting			**Number:**
9.	Action Plans implemented			**Number:**
10.	**Action plans implemented:**			
a				
b				
c				
d				
e				
	Reporting			
1	Notification forms entrered in MPDSR web-based system			**Number:**
2.	Screening forms entrered in MPDSR web-based system			**Number:**
3.	VA forms entered in MPDSR web-based system			**Number:**
	Logistics			
1.	MPDSR Guideline			
2.	Notification form			
3.	Screening form			
4.	VA form			

Issues identified:

a.

b.

c.

d.

e.

Lessons learned:

a.

b.

c.

d.

e.

Impact of implementing action plans:

a.

b.

c.

d.

e.

Supervisor's
Full name:
Post:
Health facility: