Guidelines
NATIONAL FETO-INFANT MORTALITY SURVEILLANCE MECHANISM

With the reduction of maternal mortality and infant mortality to lower levels and a majority of the infant deaths are concentrated in the early neonatal period, feto-infant mortality surveillance plays a crucial role in improving maternal and child health service delivery and also further reduction of infant mortality. It also contributes to the availability of quality feto-infant mortality data.

Surveillance of feto-infant deaths involves the ongoing, systematic collection, analysis, and interpretation of data related to feto-infant deaths, essential to the planning, implementation and evaluation of public health practice, closely integrated with the dissemination of these data to those who need to know and linked to prevention and control of such deaths. Ministry of Health has introduced a feto-infant mortality surveillance mechanism, with Family Health Bureau (FHB), as the national nodal point. The following diagram schematically depicts the national feto-infant mortality surveillance mechanism.
The objectives of the surveillance is to make available quality feto-infant mortality data, to utilize such data effectively at different levels (field, hospital, district and national levels) and to translate lessons learnt in to practice by dissemination to all stakeholders of maternal & child health.

1.0 **Feto-Infant Death Classification and definitions:**

Following definitions are used in the surveillance system:

<table>
<thead>
<tr>
<th>Age at death</th>
<th>Conception</th>
<th>22 Wks</th>
<th>28 Wks</th>
<th>Birth</th>
<th>1 Wks</th>
<th>4 Wks</th>
<th>1 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22 Wks</td>
<td>28 Wks</td>
<td>Birth</td>
<td>1 Wks</td>
<td>4 Wks</td>
<td>1 Year</td>
<td></td>
</tr>
<tr>
<td>Spontaneous Abortion</td>
<td>Early Fetal</td>
<td>Late Fetal</td>
<td>Early Neonatal</td>
<td>Late Neonatal</td>
<td>Post-Neonatal</td>
<td></td>
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<tr>
<td>Perinatal Deaths</td>
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<td>Foetal Deaths</td>
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<tr>
<td>Infant Deaths</td>
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</tbody>
</table>

1.1 **Fetal deaths** are those that occur after 22 weeks gestation in which the developing fetus dies either in utero or upon delivery. They are classified as early (22-27 weeks gestation) or late (28 weeks gestation or more).
This definition of fetal death avoids the confusion arising from the use of terms such as “stillbirth” and “miscarriage.”

1.2 **Infant deaths** are those that occur during a child’s first year (i.e. measured from birth, day 0 to day 365). Infant deaths include both neonatal and postneonatal deaths.

**Determination of Age:**
- Day 0 – the day of birth *(from the time of birth till midnight same day)*
- Day 1 – the next day following birth

1.3 **Neonatal deaths** occur during the first 28 days of life. Neonatal deaths are further categorized as “early” (0 - 7 days) or “late” (8 -28 days).

1.4 **Post-neonatal deaths** occur from day 29 through day 365 after birth.

1.5 **Perinatal deaths** include fetal deaths at 28 weeks gestation or more *(weighing >1000 g)*, and infant deaths of less than 7 days (early neonatal deaths).

**Note:** WHO recommends the inclusion of fetuses and live born neonates weighing between 500 g and 1000 g in national statistics both because of its inherent value and also it improves the coverage of reporting at 1000 g and over. Therefore, all fetuses and infants weighing at least 500 g or >22 weeks of POG at birth, whether alive or dead, should be included in the statistics. *(However, data on fetal deaths with POA < 22 weeks (500g) are only for information and not considered in statistical calculations).*
2.0 Notification of feto-infant deaths

2.1 Hospitals (Government and private hospitals)

2.1.1 Perinatal deaths

All perinatal deaths (>22 weeks POG or > 500g weight up to 7 days after birth) of both government and private hospitals should be notified to the head of the institute by the medical officer confirming the death (at obstetric or paediatric unit) using the Perinatal Death Documentation Format (P-1) within 24 hours. A copy of the P-1 should be kept with the Obstetrician or the Paediatrician/Neonatalogist (in specialized institutes) or the highest level of medical officer (in non-specialized / peripheral hospitals) for future reference and to be used at monthly hospital perinatal death audits. Original copy should be sent to Director (MCH), Family Health Bureau attached to the Monthly Hospital Perinatal Mortality Surveillance Report (P-2) every month.

Sister / Nurse in Charge of the unit where the death occurred, with the instructions from the Consultant in charge of the unit, should ensure that the format is completed by the relevant officers.

2.1.1.1 Instructions on completing Perinatal Death Documentation Format (P-1)

This data collection format complies with the WHO Application of ICD-10 to Perinatal Deaths: ICD-Perinatal Mortality (ICD-PM). The objective is to facilitate the consistent collection, analysis and interpretation of information on perinatal deaths across hospitals and countries. It focuses on the mother-baby dyad and provides information to translate outcomes into policies, programs and actions.

Please see below for specific instructions in completing the each column (A – Z) of the data format;

<table>
<thead>
<tr>
<th>A</th>
<th>BHT Number / Number of the clinical record</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Name of Mother / Baby</td>
</tr>
<tr>
<td>C</td>
<td>Ethnicity –Please select from Sinhalese / Tamil / Muslim / Other</td>
</tr>
<tr>
<td>D</td>
<td>Residential address of the mother</td>
</tr>
<tr>
<td>E</td>
<td>Medical Officer of Health (MOH) area where the mother was cared for</td>
</tr>
<tr>
<td>F</td>
<td>Age of mother in years</td>
</tr>
<tr>
<td>G</td>
<td>Foetal (FD) or Neonatal death (NND)</td>
</tr>
<tr>
<td>H</td>
<td>Gravida –number of pregnancies</td>
</tr>
<tr>
<td>I</td>
<td>Parity – number of births (either still or live)</td>
</tr>
<tr>
<td>J</td>
<td>Type of Pregnancy -Singleton, Twin, Multiple</td>
</tr>
<tr>
<td>K</td>
<td>Date of Birth of the baby. Please put in (ddmmyy) format</td>
</tr>
<tr>
<td>L</td>
<td>Place of Delivery –place (hospital / home) where the birth took place</td>
</tr>
<tr>
<td>M</td>
<td>Time of Delivery –Please put in HH:MM format eg. 16:41</td>
</tr>
<tr>
<td>N</td>
<td>Mode of delivery –Please select from -Normal Vaginal / Breech / Forceps / Vacuum / Destructive Operation / Elective CS / Emergency CS / Hysterotomy / Laparotomy for rupture uterus</td>
</tr>
<tr>
<td>O</td>
<td>POG at birth (wks) –best estimate of period of gestation</td>
</tr>
<tr>
<td>P</td>
<td>Method of POG Assessment –based on LRMP / USS / Other</td>
</tr>
<tr>
<td>Q</td>
<td>Birth weight –weight of the baby measured at birth in grams</td>
</tr>
<tr>
<td>R</td>
<td>Sex -(Male / Female / Ambiguous)</td>
</tr>
<tr>
<td></td>
<td>Date of still birth (foetal death) or neonatal death in <em>dd/mm/yy</em> format</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>T</td>
<td>Age at death (only for ENND) - During the first day of life (day zero) should be recorded in units of completed hours of life. For the second (day 1), through 7 completed days of life, age at death should be recorded in days. Please put (days + hours) – eg. If baby died 2 hours after birth: 0 days + 2 hrs</td>
</tr>
<tr>
<td>U</td>
<td>Timing of death – Antepartum / Intrapartum* / Early neonatal / Unable to classify timing * Intra-partum deaths: Deaths of babies those who had FHS on taking to the labour room (or theatre for caesarean section) and dead on birth</td>
</tr>
<tr>
<td>V</td>
<td>Cause/s of Death (ICD-PM Group) – You may put either relevant ICD codes or write the group of main disease or condition that lead to death in fetus or infant (not maternal). Please select codes for the groups of disease conditions from the annexure-1 based on the timing of death (A1 – A6, I1 – I7, N1 – N11) or ‘unable to You may put other diseases of conditions, if there is any, apart from the main cause. See notes below.</td>
</tr>
<tr>
<td>W</td>
<td>Cause/s of Death (Broad ICD-PM Cause) – Please select the broad cause from broad ICD codes (A33, A50, P05-P96, Q00-Q99) – You may put either relevant ICD codes or write broad cause. Please refer to annexure - 1 See notes below.</td>
</tr>
<tr>
<td>X</td>
<td>Cause of Death (ICD specific category) – If you have further specific details on cause of death, please include here. (No ICD codes provided). See notes below.</td>
</tr>
<tr>
<td>Y1</td>
<td>Maternal conditions (ICD-PM Group) - Please put relevant ICD code or write group of main maternal disease or condition affecting fetus or infant. M1_Complications_of_placenta_cord_and_membranes M2_Maternal_complications_of_pregnancy M3_Other_complications_of_labour_and_delivery M4_Maternal_medical_and_surgical_conditions M5_No_maternal_condition You may put other diseases of conditions of mother, if there is any, apart from the main cause. See notes below.</td>
</tr>
<tr>
<td>Y2</td>
<td>Maternal conditions (ICD-PM specific group) – Please select the specific maternal condition/s from ICD-PM Maternal condition specific group (P00-P04) – Please refer to annexure - 2 See notes below.</td>
</tr>
<tr>
<td>Z</td>
<td>Whether a forensic or pathological post-mortem was done or not</td>
</tr>
<tr>
<td>Zi</td>
<td>Filling of Certificate of Still Birth (B22) for foetal deaths &gt;28 weeks of POG or Declaration of Death (B 33) for all babies born live and later died (irrespective of POG) is compulsory. Please give relevant details.</td>
</tr>
</tbody>
</table>

NB: Each ICD PM group or maternal conditions has a limited number of ICD codes that fit in to each group. If you cannot find clinical conditions related to the case, you can write them freely in any cause of death or maternal conditions cell (U,V,W,X,Y).

Example 1: Still birth at 32 weeks due to congenital rubella
For this select ‘Antenatal’ for timing of death (T), from Annexure 1, 1.1- ICD-PM group for cause of perinatal death, under ‘Antepartum’ column, select ‘A2_Infection’(U). Then refer to 1.2 Broad ICD codes for cause of perinatal death, search for A2 and find ‘P35_Congenital_viral_diseases’ (V). Since you have further details in W, you may put ‘Congenital Rubella Syndrome’.
As mother gives a history of febrile illness in first trimester, for X, select ‘M4_Maternal_medical_and_surgical_conditions’ from Annexure – 2 relevant ICD-PM
Maternal condition specific groups under M4 – ‘P00.2 Fetus and newborn affected by maternal infectious and parasitic diseases’.

Please see below examples for further clarifications;

**Example 2**: Still birth at 29 weeks due to IUGR and maternal PIH

**Example 3**: Early neonatal death on day 2 due to Tetralogy of Fallot’s

<table>
<thead>
<tr>
<th>T</th>
<th>U</th>
<th>V</th>
<th>W</th>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antepartum</td>
<td>A2_Infection</td>
<td>P35_Congenital_viral_diseases</td>
<td>Congenital Rubella Syndrome</td>
<td>M4_Maternal_medical_and_surgical_conditions</td>
<td>P00.2_Fetus_and_newborn_affected_by_maternal_infectious_and_parasitic_diseases</td>
</tr>
<tr>
<td>Antepartum</td>
<td>A5_Disorders_related_to_fetal_growth</td>
<td>P05_Slow_fetal_growth_and_fetal_malnutrition</td>
<td>light for gestational age</td>
<td>M4_Maternal_medical_and_surgical_conditions</td>
<td>P00.0_Fetus_and_newborn_affected_by_maternal_hypertensive_disorders</td>
</tr>
<tr>
<td>Early neonatal</td>
<td>N1_Congenital_malformations_deformations_deformations_and_chromosomal_abnormalities</td>
<td>Q20_Congenital_malformations_of_cardiac_chambers_and_connections</td>
<td>Tetralogy of Fallot’s</td>
<td>No maternal condition</td>
<td></td>
</tr>
</tbody>
</table>

**Note**: All cages where relevant depending on the case (foetal death or early neonatal death OR transferred in from outside hospital) should be filled. Completing officer may leave cages blank if required data is not available. However, sending the format should not be delayed due to unavailability of few data variables.

**Prematurity** - It is preferable to only accept the diagnosis of ‘prematurity’ as the main disease or condition in the baby if further evidence, for example gestation <28 weeks and no other pathology present.

### 2.1.2 Infant Deaths

**Infant deaths** (excluding early neonatal deaths which are covered under perinatal deaths) should be notified to the head of the institute by the medical officer confirming the death using the form Hospital Infant Death Notification Form (F-1) within 24 hours.

A copy of the form (F-1) should be kept with the Paediatrician / Neonatalogist (in specialized institutes) or the highest level of medical officer (in non-specialized / peripheral hospitals) for future reference.

*Sister / Nurse in charge of the unit, with the instructions from the Consultant in charge of the unit / the highest level of medical officer, where the death occurred should ensure that the format is completed by the relevant officers.*

The head of the institution should notify all infant deaths (excluding early neonatal deaths which are covered with perinatal deaths) **within 24 hours** by telephone, telegram, fax or email to the following officers;

- Director – MCH (Family Health Bureau)
- PDHS and RDHS (where the institution located)
- PDHS and RDHS (of deceased residence)
- MOH (deceased residence)
- Head/s of the previously managed institution/s

(Residence of the mother of the deceased infant is taken as the residence of the infant.)
A copy of the completed & signed Hospital Infant Death Notification Form (F-1) (by fax/email/mail) should be sent to the area MOH and Director (MCH) by the head of the institute within 24 hours.

2.2 Field

2.2.1 Foetal deaths

All foetal deaths (> 22 weeks of gestation or >500g) and infant deaths should be notified to the respective medical officer of health (MOH) by the area Public Health Midwife (PHM) or acting PHM using the form Feto-Infant Death Notification Form (F-2) within 24 hours.

2.2.2 Infant deaths

The MOH should notify all infant deaths (0 – 365 days of age) within 24 hours by telephone, telegram, fax or email to the following officers:
- Director – MCH (Family Health Bureau)
- Head/s of the previously managed hospital/s
- PDHS and RDHS (where the institution located)
- PDHS and RDHS (of deceased residence)

*(Residence of the mother of the deceased infant is taken as the residence of the infant.)*

Note: Please refer Section 4.0 for further details.

3.0 Feto-infant Death Surveillance at Institutional Level

3.1 Custody of documents related to management

Once a fetal or infant death is reported in an institution (Government or private hospital), all the Head/s of the Institution/s where the index case was managed should take the custody of the bed head ticket (BHT), investigations, transfer forms and all other documentation related to the mother and/or infant. All the pages should be numbered and the original document should be made available for perusal of relevant officers (clinicians, JMOs and area MOH).

All relevant documents should be made available for the investigation procedures and review meetings. The BHT should not be reproduced. BHT should not be taken out of the office of the Head of the Institution and extraction of information from the BHT should be done within the office premises of the head of the institute only.

3.2 Conducting post mortems or pathological post mortems

A post mortem or pathological post mortem should be conducted wherever possible in cases of infant deaths when the cause of death could not be accurately determined.

*Note:* Please refer to the Guidelines on Conducting Pathological Post-mortems.

3.3 Foetal deaths

I. The placenta should be examined and findings should be documented in the BHT. It should be sent to the pathologist or JMO for further reporting.

II. A Certificate of Still Birth (B22) should be filled by the medical officer confirming the death in triplicate for each foetal death > 28 weeks of gestation to hand over the first copy to parents, the second copy to Registrar General's Department and the third copy to be kept as the office copy in your institution.
III. The head of the institute should send Registrar General's copy of the Certificate of Still Birth (B22) to the Vital Statistics Unit, Registrar General's Department, Denzil Kobekaduwa Mawatha, Battaramulla

No person shall bury, cremate or otherwise dispose of, or cause to be buried, cremated or otherwise disposed of, the body of a still-born child delivered in a hospital unless there has been obtained a certificate from the appropriate registrar or relevant authority, stating that the occurrence of the still-birth was notified.

3.4 Hospital Perinatal Mortality Surveillance Meetings

These meetings should be conducted by every specialised institution (including private sector) providing perinatal care once a month (may be second week) on a fixed date. Head of the institution with consultants (Obstetricians, Pediatricians, Neonatologists) should organize the meetings.

The participation of following categories of health care teams is mandatory with relevant information;

- Head of the Institution
- Obstetrician, Pediatrician, Neonatologist and other relevant Specialists
- Medical Officers from Obstetric and Neonatal Units
- MO/MCH and MOOH from the catchment area
- MO/Preventive Health
- Judicial Medical Officer
- Grade I Nursing Officer/Nursing Officer in Charge of the ward/ labour room
- MRO

Data of the index cases should be collected through the P - 1 format. The same format should be used for presenting the data at the meeting by the Medical Officers attached to the relevant obstetrics unit or SCBU/NICU.

The index cases should be discussed in detail based on three-delay model in order to identify deficiencies associated with seeking medical care, reaching the hospital and management of the mother and/or the neonate at the hospital.

The perinatal death audit process should be a no-fault finding exercise of the healthcare workers involved in the management of the pregnant mothers or infants. Whole process of the review should be confidential and each participant of the institutional review should sign the confidentiality agreement (F-4) prior to the review meeting.

The review process should focus on establishing if circumstances represent system problems that require change, developing recommendations for change and assisting in the implementation of change at hospital level and field level.

3.4.1 Reporting of Perinatal Mortality Surveillance meetings

The completed Monthly Hospital Perinatal Mortality Surveillance Report (P-2) should be sent along with all Perinatal Death Documentation Formats (P-1) within one week after conducting the meeting to Director (MCH) by the head of the institute.

National Program Manager (Child Morbidity & Mortality Surveillance) will compile all perinatal death data and maintain a database at Family Health Bureau.
3.5 Institutional review procedure of infant deaths
(Government and private hospitals)

- For all infant deaths (Born alive and later died, irrespective of the POG), a Declaration of Death (B 33) form should be filled by the medical officer confirming the death.

- A fact-finding institutional infant death review should be performed by the all institutions involved in the management of the deceased infant for each infant deaths (excluding early neonatal deaths).

- The review should be conducted within 14 days of the occurrence of an infant death as this would enable to identify precisely the circumstances that led to the death with fresh information. The circumstances of the death should be discussed in detail with the intention of identifying preventive measures.

- Conducting the institutional death review is the responsibility of the Head of the Institution. All clinicians (neonatologists or paediatricians), other clinicians and medical officers involved in the management of the case should comply with the instructions of the head of the institution.

- The review should be carried out as a team which should comprise of the following officers with relevant information:
  
  - Head of the Institution (Director/MS/DMO/MO-IC) as the team leader
  - Consultant Paediatrician / Neonatologist or the relevant specialist (eg. Surgeon) of the hospital unit in which the death occurred (acting consultant in his/her absence) and all other relevant consultants who managed the mother & the infant (Obstetrician, Surgeon, Anaesthetist, Pathologist, Microbiologist etc)
  - Medical officer/s who attended the deceased infant (DMO, MO/IC, senior house officer, MO-PBU, MO-NICU, house officer etc.)
  - Judicial Medical Officer / Forensic Pathologist
  - Grade I Nursing Officer /Nursing Officer In Charge of the ward/ labour room - when relevant
  - Heads and relevant clinicians of the hospitals where the patient was managed before the transfer
  - Medical Officers Maternal and Child Health (MO-MCH) of the districts where the mother is resident and where the hospital is situated
  - Medical Officer of Health from the mother's area of residence
  - Public Health Midwife from the mother's area of residence

  Participation of the above categories of the healthcare workers at the review meeting is mandatory.

- All original documents related to the healthcare services delivered or clinical management of the index infant from both field and hospital/s and postmortem or necropsy reports should be reviewed at the death investigation.

- The index case should be reviewed in detail based on three-delay model in order to identify deficiencies associated with seeking medical care, reaching the hospital and management of the infant at field and hospital level. Efforts should be taken to establish if circumstances represent system problems that require change, develop recommendations for change and assist in the implementation of change at hospital level and field level.

- The investigation process should be a no-fault finding exercise of the healthcare workers involved in providing filed health services or clinical management of the infant.

- Whole process of the review should be confidential and each participant of the institutional review should sign the confidentiality agreement (F-4) prior to the investigation.

- The institutional death investigation should be coordinated by the medical officer (preventive health) or a medical officer designated by the head of the institution.
- The Head of the Institution is responsible to ensure the implementation of the corrective actions within the hospital without delay as decided at the institutional review.

### 3.5.1 Reporting the infant death institutional review

- The information obtained during the investigation and the death review should be entered in the Hospital Infant Death Investigation Form (F-5) in triplicate (Office Copy / RDHS / FHB)
- Consultant Paediatrician / Neonatologist or the relevant specialist of the hospital unit in which the death occurred and/or Head of the Institution should ensure the completeness of the format.
- The completed and signed report of F-5 should be sent to the Director (MCH) within 14 days of occurrence of the infant death.

### 4.0 Feto-Infant Death Surveillance at Field Level

#### 4.1 Notification procedure of feto-infant deaths to be followed at field level

When a notifiable fetal or infant death occurs in her area, the area PHM should immediately notify it to the MOH using the Field Feto-Infant Death Notification Form (F-2).

The MOH may also receive an infant death notification directly from the head of the institution at which the death occurred or from the RDHS/MOMCH of the district to whom the death was notified.

MOH should notify all infant deaths within 24 hours by telephone, telegram, fax or email using the Field Feto-Infant Death Notification Form (F-2) to the Director (MCH) and RDHS.

- In case of the death of a mother who is temporarily resident in a MOH area, the area MOH should notify the death to the MOH of the area from where the mother came from (& where she was registered as an eligible female)
- In cases of deaths within one week of discharge from a hospital, the MOH should notify the death to head/s of the previously managed institution/s
- MOH should also ensure that all deaths are reported through H 509 (Quarterly Maternal and Child Health Return).

#### 4.2 Custody and safety of infant death documentation

All the relevant records of mother & infant (H512A, H512 B, Child Health Development Record - CHDR) should be taken over & kept safely in the MOH office till the investigations & review meetings are over.

- The MOH is responsible for the safe custody of the all the documentation related to all infant deaths
- MOH should hand over all the documents related to infant death investigations and reviews to the next MOH appointed on his/her transfer or retirement.

#### 4.3 Field infant death investigation procedure for Infant deaths

- The purpose of the field infant death investigation is to understand how a wide array of social, economic, health, educational, environmental and safety issues relate to the infant loss on a local level and in turn utilize that information to improve community resources and systems of care to reduce fetal and infant mortality.
- MOH (of the area where the mother is registered in the eligible family register or the MOH area where the deceased infant mostly received field care) is the responsible officer for the field death
review. In case of an absence of the relevant MOH, the acting MOH/AMOOH or MO-MCH should take the responsibility of conducting the field infant death investigation.

- The investigation should be done as a team comprising of MO-MCH, MOH, all AMOOH, all PHNS, all SPHM and PHM/acting PHM of the area. MO-MCH and MOH should jointly investigate the infant death.

**Note:** The investigation done previously by PHM or PHNS and filling of Infant Death Investigation Form (H678) is no longer required.

- Investigation should commence as early as possible and should be completed within fourteen (14) days of the occurrence of the infant death.
- The field health staff should contact parents through phone calls and/or home visits soon after the infant death. The staff should provide emotional support, information, and referrals to other services that assist parents and families where necessary prior to the death investigation.

- **Record review:** The team should visit the office of the PHM and examine all the relevant documents starting from the eligible family register, pregnant mother’s register, pregnancy records (H512B), family planning field records, Birth & Immunization register, Hospital Records, CHDR, PHM diary, weighing records, notes on home visits, advance programme, previous supervision reports on the area PHM etc. The team should also review birth and death certificates, post-mortem / coroner’s reports, and records from other health and social service agencies.

- **Maternal (or guardian) interview** - After family support has been initiated, the mother (or the guardian) should be invited to participate in an interview. The interview should allow the mother's voice to be heard and provides her with the opportunity to share her experiences before, during and after the pregnancy and the infant death. Other family members may also be interviewed by the investigation team in order to obtain relevant information.

- The care received by the mother (antenatal, postnatal) and the infant prior to the admission to the hospital should be assessed. The case should be reviewed in detail based on three-delay model in order to identify deficiencies associated with seeking medical care, reaching the hospital and management of the infant at field and hospital level. Efforts should be taken to establish if circumstances represent system problems that require change, develop recommendations for change and assist in the implementation of change at field level and also at hospital level.

- The investigation process should be a no-fault finding exercise of the healthcare workers involved in providing filed health services or clinical management of the infant. Whole process of the investigation should be confidential and each participant of the field investigation should sign the confidentiality agreement (F-4) prior to the death review.

- In the case of a hospital death, MOH should participate as a member in the hospital investigation team. If the institutional investigation is delayed, the MOH should visit the hospital and obtain relevant information from the hospital (from health care staff and the BHT) with the permission of the head of the institution.

- After the field infant death investigation, the MOH should implement the necessary corrective actions at field level, and the implementation of these should be discussed at the next monthly conference.

- A collective supervision of the area PHM by all the supervisory staff (MOH, AMOH, PHNS, SPHM) and should follow up the work of the PHM until the deficiencies (if any) at field level are rectified.

- If the infant death investigation has been done by the previous MOH, the present MOH should do a fresh field visit to the PHM office and the home of the deceased infant and be thorough with the details.

**4.4 Reporting the field investigation and foetal deaths**

- The information obtained during the field death investigation should be entered in the Field Infant Death Investigation Form (F-6) in triplicate (Office Copy / RDHS / FHB)
- On completion, the report should be sent to the RDHS and Director (MCH) within 14 days of occurrence of the infant death.
- A quarterly summary of all foetal deaths (obtained from the Pregnant Mother’s registers of all PHM) occurred in the MOH area should be sent to the RDHS/MO-MCH and FHB
- MOH are advised not to delay sending the F-6 just because few data are not available. Format could be sent pending such data and they can be sent separately in a letter once they are available.

4.5 Role of the MO-MCH

- The Medical Officer – MCH at district level should compile all feto-infant mortality data received from area MOOH and hospitals (Notifications / death investigation reports / post-mortem reports / perinatal death audit reports).
- He /she should maintain a feto-infant mortality database at district level
- A quarterly summary of all foeto-infant should be sent to the PDHS and FHB
- Should participate at field and hospital infant death investigations
- Should organize the district and national feto-infant mortality review meetings
- Should ensure that corrective actions are taken under the guidance of RDHS

5.0 District and National Feto-Infant Mortality Reviews (DFIMR / NFIMR)

At the end of each half year, the MOMCH should prepare a summary of Feto-Infant deaths notified during each half year and send the same to the Director (Maternal and Child Health) and PDHS.

National Program Manager (Child Morbidity & Mortality Surveillance) will also prepare a feedback summary of the deaths notified from each district and institution at the Family Health Bureau at the end of each quarter and annually. These data will be disseminated to each district and institution for verification.

District and National Feto-Infant Mortality Reviews are an important aspect of Feto-Infant mortality surveillance since it provides a forum to discuss and learn lessons out of Feto-Infant deaths at the district level. It also gives an opportunity to identify service deficiencies and to formulate preventive strategies to further reduce Feto-Infant deaths taking local contexts of the district in to consideration. Data gaps with regard to each death could be filled at DFIMRs. Each reported death should be discussed at these reviews with the aim of identifying circumstances of death in order to prevent such deaths in future. The circumstances which led to the death should be identified at the district review using three delay model.

Two half yearly District Reviews should be organized by MO-MCH on behalf of RDHS according to the following schedule.
First half yearly review - 2nd week of July
Second half yearly review - 2nd week of January (following year)

District Feto-Infant Mortality Review Team should comprise of the following officers;
- PDHS/ RDHS (chairperson)
- Provincial or District Consultant Community Physician/s
- All Head/s of the Institution/s in the district (including peripheral hospitals)
- MO-MCH
- All Paediatricians/ Neonatologists /VOGG and other relevant consultants
- Judicial Medical Officers
- Pathologists
Senior registrars / SHOO / MOO — who were involved in the management of the deceased infant or the pregnant mother
All MOOH, all AMOOH, all PHNS, SPHM, relevant area PHMM

The participation of all relevant officers is compulsory at DFIMR.

The preventive strategies should be generated to improve the availability, accessibility, utilization & quality of field health care services and essential newborn/ paediatric /obstetric services and steps should be taken to initiate the preventive activities which could be implemented at the district level.

At the end of the review the MOMCH should prepare a minute (deficiencies identified and action to be taken/ already taken) and it should be sent to the following health authorities by RDHS.
- PDHS
  - Director (Maternal and Child Health)
  - Heads of Institutes / Clinicians (Paediatricians/ Neonatologists /VOGG)
  - Sri Lanka College of Paediatricians / Sri Lanka College of Obstetricians & Gynaecologists
  - MOOH
- These minutes should be taken for discussion to assess the progress at the next district review of Feto-Infant deaths.

6.0 National Feto-Infant Mortality Review (NFIMR)

National Feto-Infant Mortality Review is a process that brings together key stakeholders of the healthcare community from both national and district level to review data on fetal and infant deaths in order to identify factors associated with those deaths, establish if they represent system problems that require change, develop recommendations for change, assist in the implementation of change at national and district levels.

Annual reviews are conducted on a district basis to review all the deaths which occurred in a particular district in the previous year with the participation of experts from the national level.

Director/Maternal and Child Health (D/MCH) in collaboration with the Provincial Director of Health Services will organize the annual review of Feto-Infant deaths in a district with the participation of representatives from professional colleges including Sri Lanka College of Obstetricians & Gynaecologists, Sri Lanka College of Paediatricians, Sri Lanka College of Community Physicians, Sri Lanka College of Forensic Pathologists and Sri Lanka College of Pathologists.

Director General of Health Services (DGHS) or in his absence the PDHS will chair this meeting. In the absence of the DGHS, a ministry official nominated by the DGHS should participate at the NFIMR to represent the DGHS.

The participation of following categories of health care teams is mandatory at the NFIMR;
- PDHS, RDHS and Deputy RDHS
- Provincial and District Consultant Community Physician/s
- All Head/s of the hospitals in the district
- MO-MCH
- All MOOH, all AMOOH, all PHNS, SPHM, relevant area PHMM
- All Paediatricians/Neonatologists & VOGG and other relevant consultants
- Judicial Medical Officers
- Pathologists
- Senior registrars / SHOO / MOO – who were involved in the management of the pregnant mothers &/or deceased infants
The RDHS, MOMCH, RSPHNO, all Paediatricians/Neonatologists, all VOGG, MOOH and AMOOH, all heads of the institutions and the relevant consultants, all the DMOO / MOO-IC of the district hospitals and peripheral units (whether or not Feto-Infant deaths occurred in their institutions) should participate at the annual review.

All the reported deaths for the year are taken for discussion by an expert panel consisting of the DGHS (or a representative of the DGHS), PDHS, Director/Maternal & Child Health, other relevant officials from the Ministry of Health, representatives of the SLCOG, SLCOP and other professional bodies.

The relevant presentation of the Feto-Infant death should be done by the MOMCH (District Statistics), Head of Institutions (Institutional statistics), VOG (Obstetric Unit statistics and details) Paediatrician/Neonatologist (Neonatal unit & Paediatric unit statistics and details) and MOH (field care) based on the presentation formats prepared by the FHB.

Following the review, minutes will be prepared by Director (Maternal and Child Health) / National Program Manager (Child Morbidity & Mortality Surveillance). Such minutes will be sent to the relevant national, district and provincial officers. The RDHS will then duplicate these minutes and send the copies to the relevant curative institutions and MOOH.

Final decisions regarding the type of death, preventability, preventive measures that should be taken at the national level will be decided during the annual review by the panel of experts.

6.1 Follow up action to NFIMR

Following the NFIMR the MOMCH should organize a meeting for all MOOH/ heads of institutions and other relevant officers to implement the corrective actions decided at the NFIMR. This meeting will be chaired by the RDHS.

Head of the institution should call for a separate meeting at the institutional level to discuss these minutes with the relevant consultants/ SHOO/ and other relevant staff in order to implement these activities.

MOMCH should report the progress of these activities after 3 months to the DGHS/ PDHS/ RDHS/ D/MCH. At the annual review of the next year the MO/MCH should present the status of implementation of preventive measures suggested at the previous years annual review

Director (Maternal and Child Health) should carry out regular discussions with the DGHS, relevant DDGG and other officials regarding issues which need departmental intervention. Issues identified at NFIMR should be taken up at Advisory Committees on Child & Newborn Health, Maternal care & Family Planning and National Committee on Family Health.

7.0 National Feto-infant Mortality database

All the important variables of feto-infant mortality information are entered in a National Feto-Infant Mortality Database maintained at Maternal and Child Morbidity and Mortality Surveillance Unit. Director – Maternal and Child Health and National Program Manager on Child Morbidity & Mortality Surveillance act as database custodians.

When all the NFIMR meetings are over, the national statistics on Feto-Infant mortality should be compiled and issued by the Family Health Bureau before the end of the next year.