



## Complete Summary

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### GUIDELINE TITLE

Stillbirth and bereavement: guidelines for stillbirth investigation.

### BIBLIOGRAPHIC SOURCE(S)

Maternal-Fetal Medicine Committee, Clinical Practice Obstetrics Committee, Leduc L, Farine D, Armson BA, Brunner M, Crane J, Delisle MF, Gagnon R, Keenan-Lindsay L, Morin V, Mundle RW, Scheider C, Van Aerde J. Stillbirth and bereavement: guidelines for stillbirth investigation. J Obstet Gynaecol Can 2006 Jun;28(6):540-5. [63 references] [PubMed](#)

### GUIDELINE STATUS

This is the current release of the guideline.

## COMPLETE SUMMARY CONTENT

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## SCOPE

### DISEASE/CONDITION(S)

Stillbirth, fetal death

**Note:** Stillbirth is defined as death that occurs prior to the complete expulsion or extraction from the mother of a fetus of more than 20 weeks' gestation or weighing more than 500 g.

### GUIDELINE CATEGORY

Prevention  
Risk Assessment

### CLINICAL SPECIALTY

Family Practice  
Internal Medicine  
Obstetrics and Gynecology

### **INTENDED USERS**

Advanced Practice Nurses  
Health Care Providers  
Nurses  
Physician Assistants  
Physicians

### **GUIDELINE OBJECTIVE(S)**

To provide an investigation protocol to help health care providers determine the cause of a fetal death

### **TARGET POPULATION**

Women who have experienced the loss of a fetus/baby

### **INTERVENTIONS AND PRACTICES CONSIDERED**

1. Establishment of a protocol to investigate possible causes of fetal death
2. Clinicians checklist for investigating potential cause of stillbirth:
  - Family history
  - Maternal medical history
  - Maternal past obstetric history
  - Current pregnancy history (specific fetal conditions, placental or cord complications detected by ultrasound or macroscopic examination)

### **MAJOR OUTCOMES CONSIDERED**

- Causes of stillbirth and their relationship to future pregnancies
- Incidence of fetal death, stillbirth

## **METHODOLOGY**

### **METHODS USED TO COLLECT/SELECT EVIDENCE**

Searches of Electronic Databases

### **DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE**

Articles related to the etiology of fetal death were identified in a search of MEDLINE (January 1993 to December 2004), the Cochrane Library, and investigation protocols from the American College of Obstetricians and Gynecologists, the Alberta Medical Association Committee on Reproductive Care, and the Centers for Disease Control and Prevention National Center for Health Statistics.

Consideration has been given to protocols for the investigation of fetal death that are currently available in Canada and in other countries.

#### **NUMBER OF SOURCE DOCUMENTS**

Not stated

#### **METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE**

Weighting According to a Rating Scheme (Scheme Given)

#### **RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE**

##### **Quality of Evidence Assessment\***

**I:** Evidence obtained from at least one properly designed randomized controlled trial.

**II-1:** Evidence obtained from well-designed controlled trials without randomization.

**II-2:** Evidence from well-designed cohort (prospective or retrospective) or case-control studies, preferably from more than one centre or research group.

**II-3:** Evidence from comparisons between times or places with or without the intervention. Dramatic results from uncontrolled experiments (such as the results of treatment with penicillin in the 1940s) could also be included in this category.

**III:** Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.

\*Adapted from the Evaluation of Evidence criteria described in the Canadian Task Force on the Periodic Health Exam.

#### **METHODS USED TO ANALYZE THE EVIDENCE**

Systematic Review

#### **DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE**

Not stated

#### **METHODS USED TO FORMULATE THE RECOMMENDATIONS**

Expert Consensus

#### **DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS**

Not stated

## **RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS**

### **Classification of Recommendations\***

- A. There is good evidence to support the recommendation that the condition be specifically considered in a periodic health examination.
- B. There is fair evidence to support the recommendation that the condition be specifically considered in a periodic health examination.
- C. There is poor evidence regarding the inclusion or exclusion of the condition in a periodic health examination.
- D. There is fair evidence to support the recommendation that the condition not be considered in a periodic health examination.
- E. There is good evidence to support the recommendation that the condition be excluded from consideration in a periodic health examination.

\*Adapted from the Classification of Recommendations criteria described in the Canadian Task Force on the Periodic Health Exam.

## **COST ANALYSIS**

A formal cost analysis was not performed and published cost analyses were not reviewed.

## **METHOD OF GUIDELINE VALIDATION**

Internal Peer Review

## **DESCRIPTION OF METHOD OF GUIDELINE VALIDATION**

This evidence obtained was reviewed and evaluated by the Maternal-Fetal Medicine Committee and the Clinical Practice Obstetrics Committee of the Society of Obstetricians and Gynaecologists of Canada (SOGC). It was approved by the Executive and Council of the SOGC.

# **RECOMMENDATIONS**

## **MAJOR RECOMMENDATIONS**

The grades of recommendations (A-E) and levels of evidence (I, II-1, II-2, II-3, and III) are defined at the end of the "Major Recommendations" field.

### **Recommendation**

A protocol should be used to investigate the possible cause of a fetal death. **(II-B)**

### **Checklist**

The following checklist is added to help the clinician at time of delivery to better investigate the potential cause of stillbirth.

### **Family History**

1. Review of family conditions
  - Recurrent spontaneous abortions
  - Venous thromboembolism (VTE) or pulmonary embolism (PE)
  - Congenital anomaly or abnormal karyotype
  - Hereditary condition or syndrome
  - Developmental delay

### **Maternal History**

1. Review of maternal medical history
  - VTE or PE
  - Diabetes
  - Chronic hypertension
  - Thrombophilia
  - Lupus
  - Autoimmune disease
  - Epilepsy
  - Severe anemia
  - Consanguinity
  - Maternal heart disease
2. Review of maternal past obstetric history
  - Recurrent miscarriage
  - Baby with anomaly or hereditary condition
  - Growth restriction
  - Gestational hypertension with proteinuria with adverse sequelae
  - Massive placental abruption
  - Fetal demise

### **Current Pregnancy History**

- Maternal age
  - Gestational age at fetal death
  - Hypertension
  - Pre-existing or gestational diabetes
  - Smoking alcohol or substance abuse
  - Pre-pregnancy weight
  - Abdominal trauma
  - Cholestasis
  - Placental abruption
  - Maternal-fetal hemorrhage
  - Preterm premature rupture of membrane or prelabour
1. Specific fetal conditions
    - Alloimmunization
    - Non-immune hydrops
    - Growth restriction
    - Infection

- Congenital anomalies
  - Chromosomal abnormalities
  - Complications of multiple gestations (e.g., twin-twin transfusion syndrome, stuck twin, placental insufficiency, polyhydramnios-oligohydramnios sequence)
2. Placental or cord complications detected by ultrasound or macroscopic examination
- Large or small placenta
  - Hematoma
  - Edema
  - Large infarcts
  - Abnormalities of structure, length, or insertion of the umbilical cord
  - Cord prolapse
  - Cord knots
  - Placental tumors

**Definitions:**

**Quality of Evidence Assessment\***

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**III:** Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.

**Classification of Recommendations\*\***

- A. There is good evidence to support the recommendation that the condition be specifically considered in a periodic health examination.
- B. There is fair evidence to support the recommendation that the condition be specifically considered in a periodic health examination.
- C. There is poor evidence regarding the inclusion or exclusion of the condition in a periodic health examination.
- D. There is fair evidence to support the recommendation that the condition not be considered in a periodic health examination.
- E. There is good evidence to support the recommendation that the condition be excluded from consideration in a periodic health examination.

\*The quality of evidence reported in these guidelines has been adapted from the Evaluation of Evidence criteria described in the Canadian Task Force on the Periodic Health Exam.

\*\*Recommendations included in these guidelines have been adapted from the Classification of Recommendations criteria described in the Canadian Task Force on the Periodic Health Exam.

## **CLINICAL ALGORITHM(S)**

None provided

## **EVIDENCE SUPPORTING THE RECOMMENDATIONS**

### **TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS**

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

## **BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS**

### **POTENTIAL BENEFITS**

Better advice for women regarding possible causes of fetal death and implications for future pregnancies

### **POTENTIAL HARMS**

Not stated

## **QUALIFYING STATEMENTS**

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This guideline reflects emerging clinical and scientific advances as of the date issued and are subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed. Local institutions can dictate amendments to these opinions. They should be well documented if modified at the local level. None of these contents may be reproduced in any form without prior written permission of the Society of Obstetricians and Gynaecologists of Canada (SOGC).

## **IMPLEMENTATION OF THE GUIDELINE**

### **DESCRIPTION OF IMPLEMENTATION STRATEGY**

An implementation strategy was not provided.

## **INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES**

### **IOM CARE NEED**

Staying Healthy

**IOM DOMAIN**

Effectiveness

**IDENTIFYING INFORMATION AND AVAILABILITY**

**BIBLIOGRAPHIC SOURCE(S)**

Maternal-Fetal Medicine Committee, Clinical Practice Obstetrics Committee, Leduc L, Farine D, Armson BA, Brunner M, Crane J, Delisle MF, Gagnon R, Keenan-Lindsay L, Morin V, Mundle RW, Scheider C, Van Aerde J. Stillbirth and bereavement: guidelines for stillbirth investigation. J Obstet Gynaecol Can 2006 Jun;28(6):540-5. [63 references] [PubMed](#)

**ADAPTATION**

Not applicable: The guideline was not adapted from another source.

**DATE RELEASED**

2006 Jun

**GUIDELINE DEVELOPER(S)**

Society of Obstetricians and Gynaecologists of Canada - Medical Specialty Society

**SOURCE(S) OF FUNDING**

Society of Obstetricians and Gynaecologists of Canada

**GUIDELINE COMMITTEE**

Maternal-Fetal Medicine Committee

**COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE**

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**FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST**

Not stated

### **GUIDELINE STATUS**

This is the current release of the guideline.

### **GUIDELINE AVAILABILITY**

Electronic copies: Available in Portable Document Format (PDF) from the [Society of Obstetricians and Gynaecologists of Canada Web site](#).

Print copies: Available from the Society of Obstetricians and Gynaecologists of Canada, La société des obstétriciens et gynécologues du Canada (SOGC) 780 promenade Echo Drive Ottawa, ON K1S 5R7 (Canada); Phone: 1-800-561-2416

### **AVAILABILITY OF COMPANION DOCUMENTS**

None available

### **PATIENT RESOURCES**

None available

### **NGC STATUS**

This NGC summary was completed by ECRI Institute on April 30, 2009. The information was verified by the guideline developer on May 22, 2009.

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