

NEBRASKA

Infant and Young Child Death Investigation Guidelines

To Investigate Sudden, Unexplained Deaths of Infants and Young Children
0 – 36 Months of Age



Vision

The Infant and Young Child Death Investigation Guidelines were developed by leaders in the state who advocate systematic investigation of unexpected infant deaths. The overall vision of the Guidelines is to provide information and guidance to investigators, support to bereaved families, and to promote health, safety, and justice for Nebraska's children.

Principles and Purpose

Nebraska experts developed these Guidelines based on recommendations from the American Academy of Pediatrics (AAP), the Centers for Disease Control and Prevention (CDC), the National Association of Medical Examiners (NAME) and the following guiding principles:

1. Recognize roles and responsibilities regarding prompt, thorough and sensitive investigation of unexpected infant/young child deaths.
2. Establish priorities for investigation of such deaths.
3. Provide tools for use in the field when investigating such deaths.
4. Provide tools for educating first responders, investigators, coroners, and others involved with investigating such deaths.
5. Respect the role that language or culture may play in the investigation of unexpected infant/young child deaths.
6. Provide recommended standards for investigating such deaths in Nebraska.

When an infant or young child dies suddenly and unexpectedly, it is vitally important that a thorough and complete investigation be conducted to determine the cause and manner of death. Although thorough investigation and documentation is recommended in any death, these Guidelines are encouraged for infants and young children ages 0-36 months and recommended for any child who dies under unknown circumstances.

The Attorney General's Office encourages organizations to include the Guidelines in education and training programs with periodic review to maintain awareness. The Team also encourages emergency medical services personnel, law enforcement and coroners to work collaboratively to establish policies and procedures relating to infant and young child death investigation, based on local or regional needs.

Developed in 1996 and revised in 2003, the CDC published reasons for a standard protocol for sudden, unexplained infant death scene investigation. They are:

1. To generate a single, reasonable hypothesis for the cause, manner, and mechanism of death.
2. To assist the pathologist, medical examiner, or coroner to rule in or rule out natural causes of death, child abuse or neglect, or injury.
3. To identify public health threats, such as those related to consumer products or unsafe health practices.
4. To use the opportunity to provide parents and caregivers information about grief counseling, support groups, and healthy infant-care practices.
5. To provide information on sudden infant and young child deaths and sudden unexplained infant and young child deaths to epidemiologists and agencies with an interest in the welfare of children.

The Guidelines recognize the sensitive nature of infant/child death scene investigations. Families can be assured that investigative questions and autopsy are standard procedures whenever such a death occurs. The investigators will have resources to address cultural issues as well as respond sensitively to the family's grief. A thorough investigation can provide the family and their health care providers with information for appropriate genetic counseling for future pregnancies if the cause of death is determined to be genetic.

Investigation Summary

Recommended forms and checklists for death scene documentation and investigation are in the Appendix. Included are forms for Emergency Medical Services, Law Enforcement, and Coroners / Pathologists.

The Attorney General's Office recommends the following as an effective summary of expectations for an unexpected infant/young child death investigation. It is not, however, a comprehensive protocol for investigative purposes (Adapted from the American Academy of Pediatrics, 2001).

It is recommended that a thorough death investigation include the following:

- ◆ Complete death scene investigation and documentation, including photographic documentation and re-enactment of the death scene with the person who found the deceased;
- ◆ Scene investigation and/or re-enactment with photos to assess sleep environment;
- ◆ Contact with the child's health care provider(s) and gathering of medical records regarding past medical history including prenatal history;
- ◆ Information gathered from social services and law enforcement agencies regarding their contact with the family and caregivers;
 - Complete autopsy with thorough documentation including photographic documentation of pertinent positives and negatives;
- ◆ Appropriate consultation by coroners with available medical specialists if needed;
- ◆ Consideration of intentional asphyxiation in cases of unexpected infant/child death with a history of recurrent cyanosis, apnea, or an apparent life threatening event witnessed only by a single caretaker or in a family with previous unexplained infant/child death(s);
- ◆ Maintenance of a supportive approach to parents during the investigation process;
- ◆ Additional studies as deemed necessary.

Which Infant and Young Child Deaths Require Investigation

The Attorney General's Office recommends that **ALL** deaths of children from birth to 36 months undergo a complete investigation unless a physician can provide a medical diagnosis to explain the death and is prepared to sign the death certificate. This includes presumed natural and accidental deaths, as well as homicides.

Following is a list of unexpected/unexplained infant deaths requiring investigation. They include, but are not limited to:

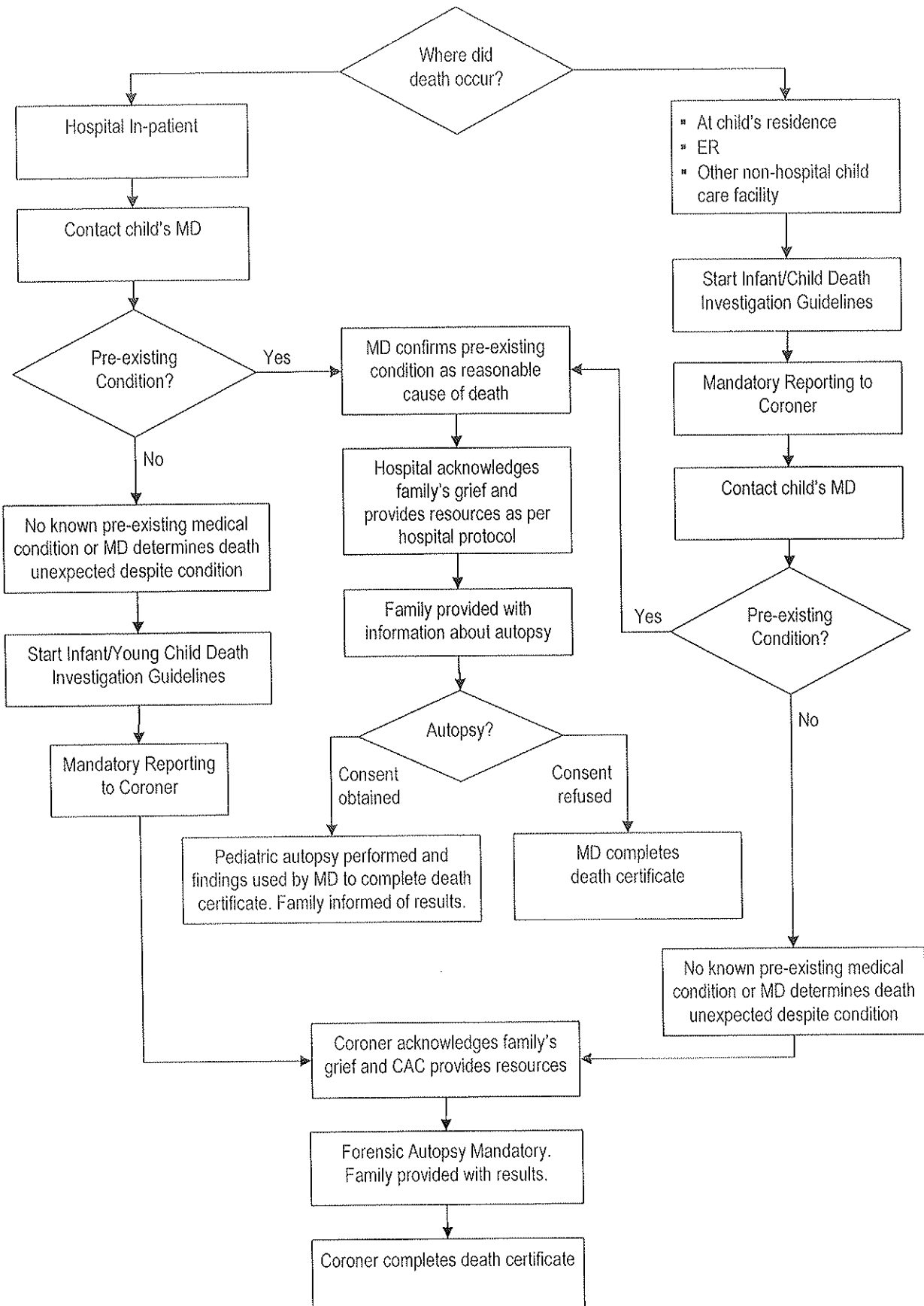
1. Deaths occurring from intentional and unintentional injuries
2. Unnatural deaths including violent deaths (homicidal, suicidal, or accidental)
3. Deaths associated with burns or chemical, electrical, or radiational injury
4. Deaths under suspicious circumstances

5. Deaths that occur during, in association with, or as the result of "medical misadventures (§71-3405)," including diagnostic, therapeutic, or anesthetic procedures
6. Deaths due to neglect
7. Deaths due to lack of access to, or failure to seek, medical care; (§71-3405)
8. Unexpected deaths of persons not disabled by recognizable disease
9. Deaths occurring outside of a licensed health care facility
10. Deaths of unborn or newborn infants in which there has been maternal use of or exposure to unprescribed controlled substances
11. Deaths of preventable premature births; (§71-3405)
12. Deaths occurring in an emergency department
13. Deaths of persons arriving at an emergency department "dead on arrival"
14. Deaths in a family or child care facility with a previous infant or young child death or near death
15. Any other deaths determined to be suspicious or concerning

Who Investigates Unexpected Deaths

Investigation of unexpected deaths requires the participation of numerous persons. The professionals who visit the scene of an infant/child death may differ from county to county. Law enforcement officers are always present. In rural areas, this may be a sheriff's office or state patrol. A first responder team may include fire and rescue personnel, paramedics, or emergency medical technicians. The coroner, coroner's physician, Child Protective Services, and county attorney may visit the scene at the request of or upon approval of law enforcement. Collaboration among agencies enhances the ability to determine accurately the cause and circumstances of death. Information about the death of one child may lead to prevention strategies to save the life of another child (AAP, 1999).

Figure 1: DECISION TREE



Causes of Unexpected Infant and Young Child Deaths

Natural Causes of Death

There are a variety of natural causes of unexpected deaths of infants and children.

These may include a host of medical conditions and, when no other cause can be found, sudden infant death syndrome. If extenuating circumstances such as an unsafe sleep environment or co-sleeping are present, a diagnosis of unexplained infant death should be considered.

Accidental Causes of Death

Fatal injuries may include but are not limited to:

- ◆ Asphyxia or suffocation
 - Wedging between the mattress and wall, frame or bars of a crib
 - Obstruction of airway due to plastic bag or other plastic material
 - Overlaying by an adult or child or portion of person, e.g., breast or arm, on a bed or sofa
 - Overlaying when the person is asleep or exhausted
 - Overlaying when the person is impaired by illness, medications, alcohol, or another drug
 - Entrapment with suspension, hanging, and entanglement by necklaces, pacifier cords, and blind cords
 - Sinking into a waterbed, beanbag, soft cushion, or sheepskin rug
 - Buried in bedding, blanket or comforter or constricted by being too heavily or tightly wrapped in clothing or bedding
- ◆ Motor Vehicle-Related
 - Injury due to air bag deployment
 - Incorrect use or lack of use of child safety seat
 - Positional apnea, bradycardia and oxygen desaturation in child car safety seat
- ◆ Choking by food or object inhalation
- ◆ Fires, flames, or smoke inhalation
- ◆ Accidental drowning
- ◆ Hyperthermia or hypothermia
- ◆ Iatrogenic or medical accidents
- ◆ Consumer product failure such as collapsed crib [Should be reported to the Consumer Product Safety Commission at www.cpsc.gov or call (800) 638-2772].

Many fatal injuries are preventable. Careful investigation is required to determine if neglect was a contributing factor to the death.

Homicidal Causes of Death

Specific types of fatal child maltreatment may include but are not limited to:

- ◆ Abandoned infants
- ◆ Battered child syndrome
- ◆ Inflicted Traumatic Brain Injury/abusive head trauma (includes diagnosis of shaken baby syndrome)

- ♦ Hyperthermia or hypothermia
- ♦ Chronic starvation and improper feeding
- ♦ Acute starvation or dehydration
- ♦ Munchausen Syndrome by Proxy
- ♦ Sexual abuse
- ♦ Medical neglect by including inattention to illnesses and failure to administer prescribed medications and treatment regimes
- ♦ Hidden or occult trauma
- ♦ Intentional suffocation
- ♦ Intentional poisoning
- ♦ Drowning

Indicators of possible homicide may include but are not limited to:

- ♦ Subdural hematoma or contusion of cervico medullary cord presenting as apnea
- ♦ Retinal hemorrhages and/or intracranial hemorrhages, such as subdural and/or subarachnoid hemorrhages and cerebral edema
- ♦ Evidence of recent or prior trauma in the deceased or siblings which suggest a pattern of abuse, particularly broken bones, bruises, burns, cuts, scars and welts
- ♦ Inconsistent or improbable explanation for injuries by parents or caregivers
- ♦ Death due to a "fall"
- ♦ Concern expressed by others that the infant/child's death was a "wrongful death"
- ♦ Previous unexplained death of a sibling or a death of a sibling due to an unintentional injury or intentional injury
- ♦ Prior referrals to child protective services
- ♦ Failure to seek timely medical care
- ♦ Significant history of alcohol or chemical abuse by parent(s) or caregiver(s)

Care has to be given during the course of the investigation not to stigmatize the family.

Bereavement

The sudden, unexpected or unexplained death of any infant or child may evoke very strong grief reactions in surviving family members, caretakers, and friends. This grief must be acknowledged by all persons involved in the investigation process. There are several ways investigative personnel can be of service and support to families who experience this tragedy:

- ♦ Be sensitive to the diversity of racial, ethnic, and religious differences, and cultural practices and beliefs surrounding both the investigative process and death itself
- ♦ If there are language barriers, assure yourself that the family understands what you are communicating by using a trained and/or experienced interpreter
- ♦ Acknowledge the family's grief by offering condolences and proceeding with the investigation in a sensitive manner
- ♦ Assure the family that everything possible will be done to identify the cause of their child's death
- ♦ Explain that questioning and an autopsy are standards in Nebraska's Infant and Young Child Death Investigation Guidelines
- ♦ Refer the family to appropriate community resources
- ♦ Contact the police chaplain or crisis team for the community
- ♦ Provide accurate, timely information about the final determination of cause and manner of death (Note: If the manner of death is determined to be homicide, the family will receive limited information)

Community support services for grieving families, caregivers, and/or friends can be provided by the local Child Advocacy Centers.

Roles and Responsibilities

Emergency Medical Services

Emergency Medical Personnel may be the first responders when an infant/child is discovered unresponsive or dead. Emergency Medical Personnel need to document observations (including the death scene), and statements made by all parties present.

Law Enforcement

Law enforcement should be notified immediately in any case. Law enforcement will often be the first agency notified, with the exception of first responding paramedics or emergency personnel.

Law enforcement is responsible for a complete description and investigation of the scene(s) of any event(s) leading to injury or death. Law enforcement should collect physical evidence and obtain background information of any suspects should criminal conduct be suspected. Law enforcement should interview and obtain statements from relevant witnesses, caretakers, and family members. Law enforcement should conduct a doll reenactment/scene re-recreation with photos and/or video tape.

Law enforcement should complete the Law Enforcement Infant/Young Child Death Investigative Form and provide the completed form to the coroner prior to autopsy. If the form cannot be completed prior to autopsy, the partially completed form should be provided to the coroner with a synopsis of all investigative information obtained up to the time of autopsy, with completion of the form to occur as soon as practical.

Coroner

The coroner should obtain and relay to the pathologist, investigative information obtained by law enforcement including, but not limited to the following:

- ♦ Law Enforcement Infant/Young Child Death Investigative Form
- ♦ Law enforcement summaries or synopsis of investigative information
- ♦ Hospital treatment records including the newborn metabolic screen
- ♦ Description, diagrams, and photographs of the scenes of all relevant events
- ♦ Prior Child Protective Services referrals and reports for the child and family
- ♦ Any further records deemed relevant for the pathologist

Nebraska Department of Health and Human Services, Child Protective Services

Child Protective Services should provide law enforcement and the coroner with information about any prior Department of Health and Human Services involvement with the deceased, family members, or caregivers. A multijurisdictional review should be conducted when warranted. Child Protective Services should assess the safety of any other children in the care of the family or caregivers and provide the family with information regarding appropriate services, including bereavement resources.

Child Advocacy Center

Neb. Rev. Statute 28-728 recommends that children who have witnessed a violent crime should receive a videotaped forensic interview at a child advocacy center. Therefore, it is recommended that siblings and/or other children in the home who may have witnessed a child death be interviewed at the child advocacy center. The child advocacy center will convene appropriate members of the multidisciplinary team to review deaths of infants and young children. The child advocacy center will distribute bereavement resources to families when appropriate during the investigative process.

Pathologist

When the coroner recommends an autopsy in an unexpected death of a child or infant, the autopsy should be conducted to include the most recent recommendations by the National Association of Medical Examiners. This currently includes: (National Association for Medical Examiners, 2005)

1. External and internal examination of the child's body
2. Radiograph of entire body, if possible
3. Removal and examination of the eyes and orbits (see Gilliland, et al., 2007 for a complete ocular protocol) when appropriate
4. Collection of tissue samples and body fluids (including blood and urine). As recommended by Centers for Disease Control and the National Association of Medical Examiner guidelines. If birth metabolic screen results are not able to be obtained, repeat samples will need to be done
5. Microscopic examination of tissue samples to determine illness, defect, or trauma
6. Toxicological testing if investigation suggests the necessity, i.e., exposure to drugs, poisons, and/or toxins
7. Testing for the presence of respiratory syncytial virus (RSV) or strains of influenza, when appropriate

The pathologist should summarize findings regarding the cause of death in a comprehensive detailed written report.

Death Certification

Medical certification of death includes:

- ◆ Date and time pronounced dead
- ◆ Date and time of death
- ◆ Question on whether the case was referred to the medical examiner or coroner
- ◆ Cause-of-death section including cause of death, manner of death, tobacco use
- ◆ Injury items for cases involving injuries
- ◆ Certifier section with signatures (NDHHS, CDC, 2003)

Certification of death should account for the confluence of events that may lead to an explained or unexplained sudden infant/young child death by considering information regarding the investigation of the scene; a review of the clinical history, circumstances, and witness accounts; and a complete autopsy (with lab work). Additionally, certification should consider the vulnerabilities of the particular child, the critical period (age of child) and possible exogenous stressors (external causes, both natural and unnatural).

Cause of Death Reporting

If the investigation and autopsy disclose findings consistent with the definition of Sudden Infant Death Syndrome, it is recommended by the National Association of Medical Examiners to report the cause of death in Part I of the cause-of-death statement on the Death Certificate as Sudden Unexplained Infant Death. It is also acceptable to report the cause of death as Sudden Infant Death Syndrome as both statements will be coded to R95, Sudden Infant Death Syndrome.

The *manner of death* may be classified as accident, homicide, suicide, could not be determined or natural. It is recommended that "could not be determined" be used to acknowledge that the true nature of the death is unknown.

If possible stressors, external causes, or gray zone findings contributed to the death, and the manner of death is anything other than natural, those conditions should be reported on the death certificate and further explained in the pathologist's narrative summary. A gray zone finding is a disease condition, possible stressor, or possible external condition that may have contributed to the death but for which cause and effect relationships cannot be established or ruled out.

Following are examples of possible stressors, external causes, or gray zone areas that should be reported in the "Describe How Injury Occurred" section of the death certificate:

- ◆ Bedsharing
- ◆ Unsafe or soft sleep surface (if found face down)
- ◆ Previous unexplained infant death of sibling
- ◆ Excessive blanketing or wrapping
- ◆ Face down position when found
- ◆ Intoxication (defined as detection of substance in infant's system)
- ◆ Prenatal exposure to tobacco smoke
- ◆ Abrupt change in sleep position
- ◆ Abrupt change in sleep location
- ◆ Abrupt change in sleep surface
- ◆ Injuries of unknown significance (specifying the type)

Specificity in reporting medical information regarding the cause of death is vital as this information is used for medical and epidemiological research and is also a measure of the local and State health status.

Appendices

Appendix 1: Forms and Checklists

Appendix 2: Medical Release Form

Appendix 3: References

Appendix 4: Glossary

Appendix 1: Forms and Checklists

Emergency Medical Services

- ◆ Nebraska Infant and Young Child Death Investigation Form

Law Enforcement

- ◆ Checklist
- ◆ Nebraska Infant and Young Child Death Investigation Form

Coroner

- ◆ Checklist
- ◆ Nebraska Infant and Young Child Death Investigation Form

Forensic Pathologist

- ◆ Nebraska Infant and Young Child Death Autopsy Guideline
- ◆ Preliminary Assessment Checklist

Nebraska Infant and Young Child Death Investigation Form (0 to 36 Months Old)

EMERGENCY MEDICAL SERVICES

Case # _____

YOUR NAME (print) _____ Title: _____

Agency: _____ County: _____ Phone: (____) _____

Signature: _____ Date: _____

NAME OF INFANT/CHILD: _____ Age: _____ Gender: _____

MOTHER/FEMALE GUARDIAN: _____

FATHER/MALE GUARDIAN: _____

OTHER CARETAKER(S): _____ Relationship: _____

HOME ADDRESS: _____

PHONE: (____) _____

GUARDIAN(S) PREFERRED LANGUAGE: _____

INTERPRETER NAME (if needed): _____

INTERPRETER PHONE NUMBER: (____) _____

SCENE:

1. Geographic setting of dwelling/location where the body was found: _____

2. Location of the body when first seen by EMS (crib, bed, car seat, floor or sofa and in which room):

3. Position of the body when first seen by EMS (on left/right side, stomach, back **and** facing up, down, side):

4. Condition of the body when first seen by EMS:

Temperature: Cold to touch _____ Warmer than room temperature _____
Flexibility: Rigid/Stiff _____ Flexible _____
Discoloration: No _____ Yes _____ If yes, color and where located: _____

Marks or Injuries, Describe: (location, size, color) _____

5. Activity of infant/child when first seen by EMS:

Breathing? No _____ Yes _____
Conscious? No _____ Yes _____
Moving? No _____ Yes _____ (describe) _____

6. Presence of any of the following where the body was found (either dried or fresh):

Blood: No _____ Yes _____
Vomit: No _____ Yes _____
Urine: No _____ Yes _____
Feces: No _____ Yes _____

7. Presence of any of the following on the body?

Frothy discharge from nose or mouth: No _____ Yes _____
Clear or bloody discharge from ear(s): No _____ Yes _____
Other body secretions, Describe: _____

8. Condition, surface and contents of the bed, crib, sofa, car seat, bathtub, or other place where body was found: (Include and retain anything that could have been in contact with infant or obstructed the nose or mouth, e.g., crib, plastic bag, curtain, tissues, pillow, blanket, feeding bottle, pacifier, stuffed animal, other toys). _____

IMMEDIATE HISTORY:

1. Who has been in contact with the child in the last 48 hours?

Name: _____ Relationship: _____ Day/Date/Time: _____

Emergency Medical Services

2. **Last seen alive:**

By whom? Name: _____ Relationship: _____ Day/Date/Time: _____

Location & Position: _____

How Body Looked: _____

What was infant/child doing when found? _____

Source of information: _____ Phone: (____) _____

3. **Actions taken by any caretaker or other person when found (not a first responder):** [Include if child was picked up, shaken, pinched, if CPR or another form of resuscitation was attempted, if anything was added to or removed from the body or scene, if any articles of clothing were removed.]

By whom? Name: _____ Relationship: _____ Day/Date/Time: _____

Action(s) taken: _____

Reason(s) given: _____

Source of Information: _____ Phone: (____) _____

4. **Other significant circumstances or information related to the scene, body, or history:** [Include anything unusual or that might need to be followed up by the investigator or coroner such as: prescription or over the counter medications taken, alcohol or drugs used by caregiver, excessive fatigue of caregiver, etc.] _____

5. **Action(s) taken by EMS at the scene:** _____

6. **Pronounced:** No _____ Yes _____

If yes, by whom? _____ Phone: (____) _____

7. **Transported:** No _____ Yes _____

If yes, to which hospital or urgent care center? _____

ER/urgent care personnel: _____ Phone: (____) _____

7. Action(s) taken by EMS during transportation: _____

When completed, copy form (& all attachments) for your agency files. Forward the original to the Coroner.

LAW ENFORCEMENT CHECKLIST

At the Scene

- Make death scene as big as it needs to be.
- Document everything: Doll re-enactment/scene re-creation. Color photos of the complete scene are recommended. Videotaping may be useful for documentation.
- Retain all significant items (See item #13 on page 3). **These items may hold emotional significance to the family, so return when no longer needed.**
- If law enforcement must leave the scene, for example to accompany or assist emergency personnel, direct adults at the scene not to remove any furniture or bedding from the scene; do not wash bedding or clothing related to the child's death.
- A retrospective visit to the scene will be needed if the child was transported. Obtain consent or search warrant if necessary.

Witnesses

- The sources for information should come from those with first-hand knowledge of the events surrounding the incident. If language or culture are barriers, make sure you are assisted by a trained and experienced interpreter.
- Interview all adults, caregivers, and older children at the scene and/or in the household.
- Obtain signed medical release if possible.

Attachments to the Nebraska Infant/Young Child Death Form or Department Procedures

- Document everything, including all correspondence, verbal or written with any other agency.
- Complete departmental standard investigation form used by your agency. Complete all demographic, technical, historical, and disposition information on the investigation form.
- Obtain copies of 911 tapes, ambulance run sheets, law enforcement reports, and emergency room reports.

In General

- Complete infant/young child death scene investigation form in **ink**. Send copy to coroner.
- Have a resource list at your disposal, including the county attorney, coroner, child advocacy center, grief support organizations, and other relevant agencies.

Nebraska Infant/Young Child Death Investigation Form (0 to 36 Months Old)

LAW ENFORCEMENT

Date: _____ Time of Call: _____ Case # _____

YOUR NAME: _____ Title: _____

Agency: _____ County: _____ Phone: (____) _____

Signature: _____ Date: _____

NAME OF CHILD: _____ Date of Death: _____

Place of Death (address, city & county): _____

Gender: Male Female: Age: Months: _____ Days: _____ Date of Birth: _____

Place of Birth (address, facility, city & county): _____

NAME OF HEALTH CARE PROVIDER FOR CHILD: _____

Address: _____ Phone: (____) _____

NAME OF MOTHER/FEMALE GUARDIAN: _____

Relationship: _____ Age: _____ Date of Birth: _____

Phone: Evenings: (____) _____ Days: (____) _____ Cell: (____) _____

Current Address: _____ SSN: _____

Length of Time at this Address: Years: _____ Months: _____ Date Moved: _____

Last Address: _____

Current Employer: _____ Employer Address: _____

NAME OF FATHER/MALE GUARDIAN: _____

Relationship: _____ Age: _____ Date of Birth: _____

Phone: Evenings: (____) _____ Days: (____) _____ Cell: (____) _____

Current Address: _____ SSN: _____

Length of Time at this Address: Years: _____ Months: _____ Date Moved: _____

Last Address: _____

Current Employer: _____ Employer Address: _____

Name of all caregivers, i.e., live-in partners, babysitters, etc., for past 30 days: _____

Siblings (#, age, gender): _____

GUARDIAN(S) PREFERRED LANGUAGE: _____

INTERPRETER NAME: _____ PHONE: (____) _____

Law Enforcement

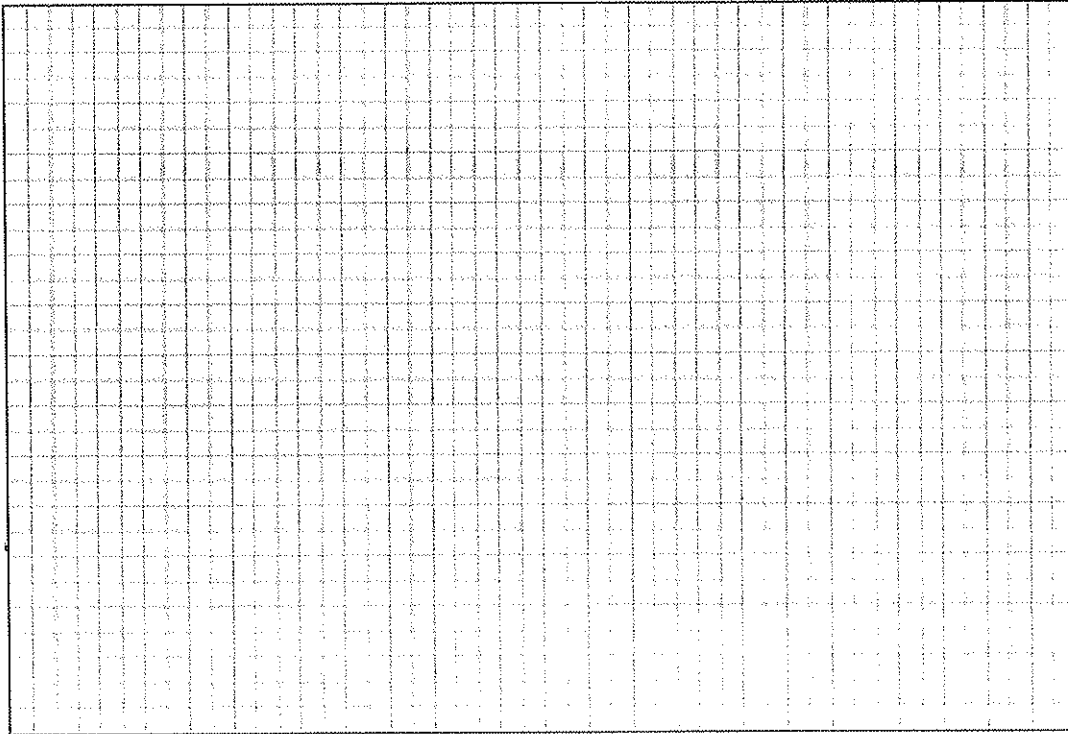
Nebraska Infant/Young Child Death Investigation Form (0 to 36 Months Old)

LAW ENFORCEMENT

Date: _____ Time of Call: _____ Case # _____

SCENE:

- 1. Last time child was seen alive: _____ By whom: _____ Relationship: _____
- 2. Time child was found unresponsive: _____ By whom: _____ Relationship: _____
- 3. Geographic location where the body was found (single/multiple dwellings; general quality): _____



- 4. Location of the body when first seen by officer (crib, bed, car seat, floor, sofa **and** in which room): _____
- 5. Position of the body when first seen by officer (on left/right side, stomach, back **and** facing up, down, side; nose/mouth covered or obstructed, etc.): _____
- 6. Condition of the body when first seen by officer:
 - Temperature: cold to touch warmer than room temperature
 - Flexibility: rigid/stiff flexible
 - Discoloration: No Yes If yes, color and where located: _____
- 7. Activity of child when first seen by Law Enforcement:
 - Breathing? No Yes
 - Conscious? No Yes
 - Moving? No Yes If yes, describe _____

Law Enforcement

8. Type and condition of clothing worn by child:

- Fit child? No Yes
- Clean? No Yes
- Dry? No Yes
- Torn? No Yes

Other (describe): _____

9. Condition of diaper/underpants (soiled, wet, dry): _____

10. Presence of any of the following where the body was found (either dried or fresh):

- Blood: No Yes
- Vomit: No Yes
- Urine: No Yes
- Feces: No Yes

Other (describe): _____

11. Presence of any of the following where the death occurred if different than where found:

- Blood: No Yes
- Vomit: No Yes
- Urine: No Yes
- Feces: No Yes

Other (describe): _____

12. Child Diagram

If present, indicate. If not present, enter "None."

- _____ Drainage or discharge from body or orifices
- _____ Marks or bruises
- _____ Location of diagnostic or therapeutic devices
- _____ Pale pressure mark areas
- _____ Predominant areas of lividity

13. Condition, surface and contents of the bed, crib, sofa, car seat, bathtub, or other place where body was found:

[Include and retain anything that could have been in contact with child or obstructed the nose or mouth: crib, plastic bag, curtain, tissues, pillow, blanket, feeding bottle, pacifier, stuffed animal, other toys.]

Type/condition of sleeping surface:

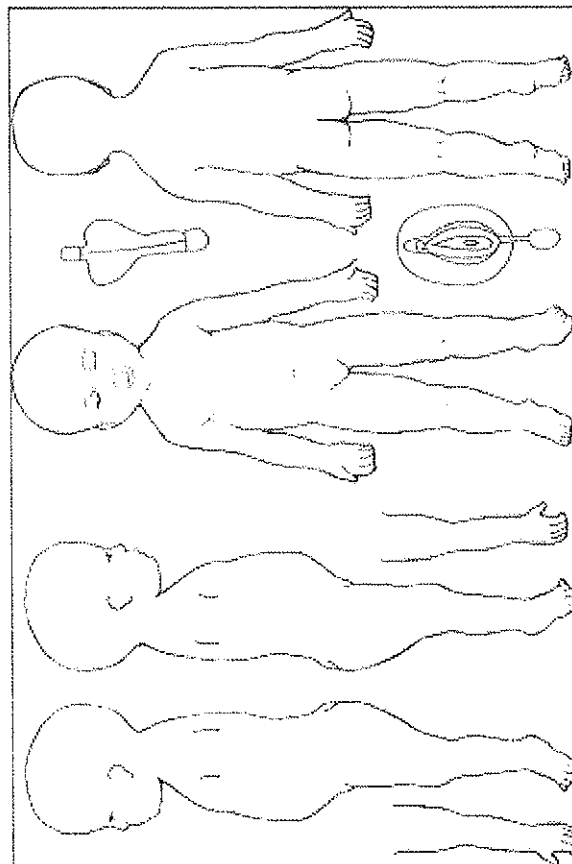
of blankets/layers: _____

Support of mattress: _____

Distance between mattress and sides of crib: _____

Sturdiness of rails: _____

Other objects that could have been in contact with child (plastic bag, curtain, tissues, pillow, feeding bottle, pacifier, stuffed animal, other toys): _____



Law Enforcement

14. For child deaths involving bathtub or other water situations:

Depth of water: _____

Temperature of water: _____

Type of container holding water: (ceramic, plastic, metal, etc.) _____

Location of hot and cold water sources near child: _____

15. Was child sleeping with another child or an adult? No Yes

If yes, Name: _____

Relationship: _____ Age: _____ Date of Birth: _____

Any significant physical, emotional, or other characteristics (overweight, sleepy, drunk, sick): _____

16. Pets in area: No Yes If yes, describe: _____

17. Presence of potentially harmful medicines, toxins (fumigants, pesticides, mold), tobacco, alcohol, or illegal drugs: _____

18. Evidence of dampness, visible standing water, or mold growth: _____

19. Types, amounts, and apparent adequacy of the food available for the child: _____

20. Temperature Conditions:

Outdoors/temperature: _____ Date/Time noted: _____

Indoors/temperature: _____ Date/Time noted: _____

Thermostat reading: _____ Date/Time noted: _____

Thermostat setting: _____ Date/Time noted: _____

Method of heating or cooling used (e.g., gas, electric, wood, propane, forced air, radiator, electric baseboard, fans, air conditioners): _____

21. Presence of a functioning carbon monoxide monitor? No Yes

22. Evidence of alteration of the body or scene: _____

23. Actions taken by any caretaker or other person when found:

Attempt to resuscitate: No Yes By whom: _____

Resuscitations efforts by First Responder: _____

24. All first responders at the scene [Include EMS, fire & rescue, law enforcement, coroner, police chaplain, and others (not yourself)].

Agency	Name	Phone#
_____	_____	_____
_____	_____	_____
_____	_____	_____

25. Transported: No Yes

Name of hospital: _____

Resuscitation efforts at Hospital: _____ Attending Physician: _____

Arrival Time: _____ Who Transported: _____

26. Pronounced: No Yes By whom: _____
27. Scene Photos taken: No Yes
28. Doll reenactment: No Yes
29. Evidence collected: No Yes
30. Scene Diagram: No Yes
31. Signed Medical Release Form Obtained: No Yes
32. NHHS Protection & Safety notified: No Yes

Nebraska Infant/Young Child Death Investigation Form (0 to 36 Months Old)

LAW ENFORCEMENT

Date: _____ Time of Call: _____ Case # _____

IMMEDIATE HISTORY

1. Source of medical information: Physician Other health care provider Medical Records Family Other, specify: _____

2. Last feeding:

By whom? Name: _____ Relationship: _____ Day/Date/Time: _____

Contents of last feeding: _____

Amount eaten & appetite: _____

Source of Information: _____ Phone: _____

Usual type of feeding (bottle, breast, formula, breast milk, cow's milk, baby food, etc.): _____

3. Recent Illnesses in Child (past 72 hours):

- Cold Vomiting Allergies
 Sniffles Fever/Sweating Injury
 Cough Drowsy Other
 Wheezing Irritable Specify: _____
 Diarrhea Fussy

4. Recent Illnesses in Household Members (past 72 hours):

Illness: _____ Who is affected: _____ Relationship: _____
Illness: _____ Who is affected: _____ Relationship: _____
Illness: _____ Who is affected: _____ Relationship: _____

5. Recent Illnesses in Any Other Person in Contact with the Child: (day care, church, etc.)

Illness: _____ Who is affected: _____ Relationship: _____

6. Medication(s)/Home Remedies:

Was child taking medication? No Yes If yes, describe medication/home remedy: _____
Amount taken: _____ Time of last dosage: _____

7. Chemical Exposure:

Was child exposed to chemicals/toxins? No Yes
If yes, Name of chemical(s)/toxin(s): _____ When exposed: _____

8. Injury/Fall: Did child have a recent accident/fall/injury? No Yes If yes, describe _____

9. Does anyone in household smoke? No Yes If yes, who and how much? _____

10. Does anyone in household use drugs/alcohol? No Yes If yes, who and how much? _____

Law Enforcement

Does anyone in household have a serious physical or mental illness? No Yes

If yes, describe: _____

11. Last time child seen by medical provider: Date: _____ Location: _____

Physician: _____ Reason seen: _____

12. Last immunizations (date and type): _____

13. Have police been called to the home in the past? No Yes If yes, describe: _____

14. Prior contact with child protective services? No Yes If yes, describe: _____

15. Documented history of child abuse/neglect: No Yes If yes, describe: _____

MEDICAL HISTORY

1. Child length at birth: _____ inches or _____ centimeters

2. Child weight at birth: _____ pounds _____ ounces or _____ grams

3. Compared to delivery date, was child born on time, early, or late?

On time Early – How many weeks? _____ Late – How many weeks? _____

4. Was the child a single, twin, triplet, or higher gestation?

Single Twins Triplet Quadruplet or higher gestation

5. Were there complications during pregnancy? No Yes If yes, describe: _____

Were there complications during delivery or at birth? (emergency c-section, child needed oxygen):

No Yes If yes, describe: _____

7. Birth Hospital Name/Location: _____

8. At any time in the child's life, did s/he have an incident of:

	Unknown	No	Yes	Describe:
Allergies (Food, medication or other)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Abnormal growth or weight gain/loss	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Apnea (stopped breathing)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cyanosis (turned blue/gray)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Seizures or convulsions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cardiac abnormalities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Metabolic disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

9. Did the child have any birth defect(s)? No Yes Describe: _____

10. Has the child ever been taken to the emergency room and/or hospitalized? No Yes

If yes, indicate reason(s): _____

11. Immunizations up to date? No Yes

PREGNANCY HISTORY

1. At how many weeks did the birth mother begin prenatal care?

_____ Weeks _____ Months _____ No prenatal care _____ Unknown

2. Where did the mother receive prenatal care?

Physician/provider _____ Hospital/clinic _____ Phone _____
Street _____ City _____ State _____ Zip _____

3. During her pregnancy, did the birth mother have any complications? No Yes

If yes, specify: _____

4. Was the birth mother injured during her pregnancy with the child? (e.g., auto accident, falls)

No Yes If yes, specify _____

5. During her pregnancy, did she use any of the following?

	Unknown	No	Yes	Describe:
Over the counter medicines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Prescription medications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Herbal remedies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cigarettes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Alcohol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

6. Currently, does any caregiver use any of the following?

	Unknown	No	Yes	Describe:
Over the counter medicines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Prescription medications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Herbal remedies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cigarettes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Alcohol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

7. Do any of the caregivers have a previous history of unexplained infant/child deaths?

No Yes

If yes, where? _____

Cause of death _____

Age of child at death _____

CORONER CHECKLIST

(To be completed by, or at the request of, the coroner).

Obtain the following documents, if available:

- All demographic information on the child, parents, caregivers, household contacts and siblings
- Child's complete medical records surrounding the death including the emergency department and EMS documentation
- Medical records from prior hospitalizations, this may require a search of all local hospitals.
- Records from the child's birth including mother's prenatal records. The newborn metabolic screen is necessary for a complete investigation and if it cannot be obtained, the screen will need to be repeated post-mortem.
- Medical records from well child visits and other physician visits
- Complete police reports from the death investigation as well as any prior police reports relating to the child or family. This would include crime scene photographs, autopsy photographs, interviews and any other information gathered by law enforcement
- Any prior HHS contacts or investigations
- Any other pertinent information related to the child, the family or the death investigation

Copies of these records should be delivered to the pathologist performing the autopsy.

Once the autopsy and report is completed, further consultation with other medical or legal professionals may be necessary in the investigation.

Nebraska Infant/Young Child Death Autopsy Guidelines (0 to 36 months old)

PATHOLOGIST

Case # _____

YOUR NAME (print) _____ Title: _____

Agency: _____ County: _____ Phone: (____) _____

Signature: _____ Date: _____

AUTOPSY GUIDELINES:

1. Perform the autopsy as soon as possible.
2. It is recommended that the NAME autopsy guidelines for a sudden unexpected infant death investigation be followed. This includes a thorough internal and external examination with microscopic sections as necessary.
3. This will likely include the following:
 - Accurate body measurements
 - Full body photographs as well as face profile, extremities front and back.
 - Full body x-rays, if possible.
 - Removal, examination, and autopsy the eyes and orbits (see Gilliland, et al., 2007 for a complete ocular autopsy protocol), when appropriate.
 - Complete internal and external examination of the child's body.
 - Collection of tissue samples and body fluids. If a complete newborn screen is not available, consider repeating the screen to rule out metabolic illness.
 - Microscopic examination of tissue samples to determine illness, defect, or trauma
 - Toxicological testing if investigation suggests the necessity, i.e., exposure to drugs, poisons, and/or toxins.
 - Testing for the presence of respiratory syncytial virus (RSV) or strains of influenza when appropriate.

PRELIMINARY ASSESSMENT:

NAME OF CHILD: _____ **Age:** _____ **Gender:** _____

- | Yes | No | Issue |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Cause of death due to natural causes – Not SIDS/SUIDS |
| <input type="checkbox"/> | <input type="checkbox"/> | Death due to trauma (injury), poisoning, or intoxication |
| <input type="checkbox"/> | <input type="checkbox"/> | Asphyxia due to such causes as overlaying, wedging, choking, obstruction of nose or mouth, re-breathing, neck compression, immersion in water |
| <input type="checkbox"/> | <input type="checkbox"/> | Environmental hazards such as carbon monoxide, noxious gases, chemicals, sprays, electricity, devices operating in area, licit or illicit drug exposures, habitual exposure to cigarette smoking |
| <input type="checkbox"/> | <input type="checkbox"/> | Dehydration present |
| <input type="checkbox"/> | <input type="checkbox"/> | Delayed bone age documented |
| <input type="checkbox"/> | <input type="checkbox"/> | Criteria for Failure to Thrive met [weight <2 SD below expected mean weight for age and sex; <3 rd percentile for weight and length] |
| <input type="checkbox"/> | <input type="checkbox"/> | Bed-sharing with other people or animals on any surface |
| <input type="checkbox"/> | <input type="checkbox"/> | Unsafe sleeping surface or sleeping conditions |
| <input type="checkbox"/> | <input type="checkbox"/> | Acute change in sleep position (placed in different position or place than usual) or diet (introduction of new food type) |
| <input type="checkbox"/> | <input type="checkbox"/> | Religious, cultural, or ethnic home remedies or treatments |
| <input type="checkbox"/> | <input type="checkbox"/> | Hyper- or hypothermia from hot or cold environment |
| <input type="checkbox"/> | <input type="checkbox"/> | Hyperthermia from excessive blanketing, clothing, or wrapping |
| <input type="checkbox"/> | <input type="checkbox"/> | Previous acute life threatening events (ALTEs) |
| <input type="checkbox"/> | <input type="checkbox"/> | Recurrent visits to medical care facilities without a diagnosis being made |
| <input type="checkbox"/> | <input type="checkbox"/> | Recent falls or injury |
| <input type="checkbox"/> | <input type="checkbox"/> | Prior death(s) of sibling(s) |
| <input type="checkbox"/> | <input type="checkbox"/> | Previous encounters with police or social service agencies |
| <input type="checkbox"/> | <input type="checkbox"/> | Suspicious circumstances or questionable witness accounts |
| <input type="checkbox"/> | <input type="checkbox"/> | Resuscitation or agonal (pre-terminal) medical treatment |
| <input type="checkbox"/> | <input type="checkbox"/> | Request for organ or tissue donation |
| <input type="checkbox"/> | <input type="checkbox"/> | Objection to autopsy |
| <input type="checkbox"/> | <input type="checkbox"/> | Other alerts for pathologist's attention |

Appendix 2: Sample Medical Release Form and Coroner's Cover Page

Date:

Office Address
Street
City, State, Zip

Re:
DOB:
DOD:
SS #

TO WHOM IT MAY CONCERN:

Please provide this office with any and all medical records of the above-named individual from _____ to the present. I would appreciate your help as soon as possible. These records may be faxed to me at _____.

Thank you for your prompt response.

Sincerely,

Name
Title

CORONER'S PRELIMINARY REPORT

Name _____
Last First MI (CHILD)
SS # Age DOB Race/Sex

Home address _____

Address when called/location of injury _____

Date of death/found _____ Time of death/found _____ am/pm

Time of injury _____ am/pm Time pronounced _____ am/pm

Next of Kin/relationship _____ phone # _____

Cause of death _____

Mortuary/Transport _____

Doctor _____ Sign DC? Y/N Phone # _____

Reporting Party/Badge # _____ Phone # _____

Agency/Hospital _____ time reported _____ am/pm

MVA – driver/pass/ped RB# _____ NATURAL ACCIDENT HOMICIDE SUICIDE

Facts/Circumstances surrounding death _____

TOX/XRAY/DENTAL/HOSP. BLOOD/MED RECORDS/ SCENE PHOTOS/CPS/POLICE RPTS/NORS
AUTOPSY/NO AUTOPSY

Date _____ Acting Coroner _____

Appendix 3: References

Websites

For the most current guidelines about child death investigations and autopsies, please refer to:

- American Academy of Pediatrics: <http://www.aap.org>
- Center for Disease Control: www.cdc.gov/sids
- National Association of Medical Examiners: <http://thename.org>

References

To review the most current information about child death investigations, policies, and autopsies, refer to the following resources:

- American Academy of Pediatrics Committee on Child Abuse and Neglect. Policy statement: Distinguishing sudden infant death syndrome from child abuse fatalities (RE0036). *Pediatrics*. 2001; 107(2), 437-441.
- Center for Disease Control (CDC). Guidelines for death scene investigation of sudden, unexplained infant deaths: Recommendations of the interagency panel on sudden infant death syndrome. *MMWR*, 45(RR10), June 21, 1996.
- Center for Disease Control (CDC). Medical examiners' and coroners' handbook on death registration and fetal death reporting. DHHS Publication PHS2003-1110. National Center for Health Statistics. Hyattsville, MD. April 2003.
- Hanzlick, R. What is essential in SIDS/OID investigation? Manner of death, and what's in a NAME? Presented at the Interim Scientific Meeting of the National Association of Medical Examiners, New Orleans, Feb. 22, 2005.
- Krous, H. Instruction and reference manual for the international standardized autopsy protocol for sudden unexpected infant death. *J SIDS Infant Mortality*, 1996; 1:203-46.
- Krous, H.F., Beckwith, J.B., Byard, R.W., Rognum, T.O., Banjowski, T., Corey, T., Cutz, E., Hanzlick, R., Keens, T. G., Mitchell, E. A.: Sudden infant death syndrome and unclassified sudden infant deaths: A definitional and diagnostic approach. *Pediatrics*, 114 (1), July 2004: 234-238.
- National Institute of Justice. Death investigation: A guide for the scene investigator. NCJ 167568, November 1999, Research Report, Steven C. Clark, Ph.D., Available at <http://www.ncjrs.org/pdffiles/167568.pdf> (March 2005).

Appendix 4: Glossary

ALTE – Apparent Life Threatening Event – apparently healthy infant found limp, pale, cyanotic, or possible apnea requiring significant stimulation and/or CPR to terminate the event.

Apnea – absence of airflow which may be the result of absence of respiratory effort (central), obstruction of the airway (obstructive), or a combination of both mechanisms (mixed). Pathologic apnea is an event longer than 20 seconds or is accompanied by significant symptoms.

Asphyxia – cessation of effective respiration. Insufficient or absence of exchange of respiratory gases.

Bruises (Contusions) – leakage of blood into the tissue following blunt trauma sufficient to rupture small blood vessels.

Cerebral Edema - the state in which there is some local or diffuse increase in brain water. Cerebral edema is probably the most common reaction to injury in the brain.

Child Abuse – generally defined as non-accidental physical injuries, sexual assaults, and/or other abusive acts inflicted upon a child by the parent, guardian, or other person responsible for the child’s care. It also includes neglect which occurs when the child’s caregiver fails to supply food, clothing, shelter or medical care, or fails to protect the child from conditions that seriously endanger his/her health.

Forensic Pathology – deals with the application of science and methods of pathology to the resolution of medico-legal questions. The field is broad and involves many disciplines including: clinical medicine, special areas of trauma and crime-lab related areas. Most forensic pathologists function in conjunction with the coroner’s office in any particular jurisdiction.

Hemorrhages – excessive discharge of blood from ruptured blood vessels.

Inflicted Traumatic Brain Injury (ITBI) or Abusive Head Trauma – Referred to as Shaken Baby Syndrome in the non-medical community. This is a better, more descriptive term. Typically the child will present with subdural hemorrhage, brain injury and retinal hemorrhages. (See shaken baby syndrome)

Retinal hemorrhage – Bleeding of the retina, the membrane on the inside, back of the eye which receives light and transmits it to the brain to allow for sight.

Shaken Baby Syndrome - the resultant injuries that occur to an infant or young child after being violently shaken. Shaken must be of such a force that a lay observer would

recognize it as dangerous. The mechanisms involved include rotational forces, hyperextension-flexion, acceleration-deceleration injury, and tearing of the bridging veins.

Subdural hematoma/hemorrhage – a collection of blood between the dural and arachnoid membrane; a frequent finding in pediatric abusive head trauma. Results from superficial tensile and/or shearing strains to vascular tissues caused by differential acceleration of the skull and brain, resulting from anterior-posterior cranial acceleration of relative short duration and high magnitude.

Sudden Infant Death Syndrome (SIDS) – the sudden death of an infant under one year of age, which remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of the clinical history. Autopsy is required by Nebraska law to establish the cause of death as SIDS.

Sudden Unexplained Infant Death (SUID) – Sudden unexplained infant death applies to the death of an infant less than one year of age in which investigation, autopsy, medical history review, and appropriate laboratory testing fails to identify a specific cause of death. SUID includes cases that meet the definition of SIDS.

Sudden Unexplained Infant Death in Childhood (SUDC) – term used when death occurs to a child over the age of 12 months. The cause of death remains unexplained after a thorough investigation, including examination of the death scene, performance of a complete autopsy, and a review of the child and family's medical history.

Suffocation – obstruction of the airway by covering the nose and mouth or through starvation of oxygen through enclosure.

