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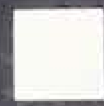
Report to the Governor
and General Assembly

Iowa Child Death Review Team



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FOREWORD

Lon Walker, Chairperson

The public saw a few newspaper headlines in 1998 about children's deaths, but the fact that 332 young Iowans, ages six and under, died in 1998 went largely unnoticed. That is tragic because many of these deaths were preventable.

The Iowa Child Death Review Team (CDRT) is chartered to review the deaths of all children, ages six and under, and to present to the governor, legislature, and state agencies suggestions on how to make Iowa safer for children. This report provides statistical data on the deaths of the 332 youngsters and presents ideas to help lower the number of deaths. Several of our suggestions are repeats from previous reports, yet they remain as viable as ever. Most relate to improved reporting and investigating that will allow the CDRT to make even better recommendations in the future based on better information. Some require education of the public and professionals, but all relate directly to Iowa's most important resource, our children.

The number of Sudden Infant Death Syndrome (SIDS) deaths is, unfortunately, on the rise, along with deaths from birth defects, and accidents. As we learn more about the risk factors for SIDS, such as non-supine sleep position, prenatal and secondhand smoke exposure, and co-sleeping in an adult bed, we should see a decrease in SIDS rates if we can successfully get the word out to young parents and other care providers. We continue to see birth defects as the result of alcohol and drug use by pregnant women. In addition, lack of prenatal care and continued smoking during pregnancy are often related to an increasing number of neonatal deaths from prematurity and birth defects. Traffic collisions and home accidents are generally preventable, but kill our children at an alarming rate because of inadequate supervision or existence of unsafe situations.

It is our hope that with the assistance of the Iowa Department of Public Health, our recommendations will result in a decline in the number of deaths of our children as we begin a new millennium. As we said in last year's report, if we are serious about making Iowa safer for our kids, careful consideration must be given to these recommendations.

Executive Summary — 1999 Child Death Review Team

In 1995, the Iowa General Assembly authorized the creation and responsibilities of the Iowa Child Death Review Team (CDRT). According to the *Code of Iowa 135.43*, the team must:

- Collect, review and analyze child death certificates and data, including records, concerning the deaths of children ages six and younger, and prepare an annual report concerning the causes and manner of child deaths.
- Recommend to the governor and the general assembly interventions to prevent deaths of children.
- Recommend to the agencies represented on the CDRT changes that may prevent child deaths.
- Maintain the confidentiality of any patient records or other confidential information reviewed.
- Develop protocols and establish a committee to review child abuse investigations that involve the death of a child.

The membership of the Child Death Review Team (CDRT), method of appointment, length of term, and need for gender and political balance were defined in legislation. The Department of Public Health was given responsibility for providing staff and administrative support.

The CDRT determined that its method of operation would be to review records of all Iowa residents, newborn through six years of age, who died during the previous calendar year, regardless of where the child died. Records would also be reviewed for those out of state residents in the same age range who died in Iowa. The CDRT established subcommittees to assist in the review process. These subcommittees give reports to the CDRT at regular intervals. The full CDRT reviews records of all child deaths resulting from intentional and unintentional injury, Sudden Infant Death Syndrome, and other selected deaths as recommended by subcommittees.

The following working definition of a "preventable death" was adopted and is used by the CDRT in its reviews:

A preventable death is one in which an individual or a community could have reasonably done something that would have changed the circumstances that led to the death.

For the 1998 calendar year, 332 deaths of children from birth through six years of age were identified and reviewed. The CDRT completely reviewed available records for 90 (27%) of these 332 deaths. The remaining 242 deaths were each reviewed by a subcommittee of the CDRT. The CDRT met eight times in 1999. Meeting attendance and participation were commendable, exemplifying each individual team member's commitment to the CDRT's mission. At each meeting, the members divided into work groups, each reviewing from three to five records of child deaths and later discussing with the entire group the circumstances surrounding the deaths and steps that might have prevented the deaths, if any.

Recommendations for prevention of future deaths address a broad range of issues. **To aid the CDRT in their reviews, a primary recommendation this year is to mandate use of the Infant Death Scene Investigation Protocol/Form by each county medical examiner for all infant deaths where the cause of death is suspected to be Sudden Infant Death Syndrome or is undetermined at the death scene.** This recommendation and many of the other recommendations to the Governor and the Iowa General Assembly were made in previous years and are again included in this year's report. They continue to be strongly recommended as measures that, if implemented, could save Iowa's children from early deaths. Additional recommendations are made to state agencies and their local agents.

Most of these recommendations revolve around two issues: improved education to professional groups and the public, and, expedited collection of information related to child deaths. Concerns regarding incomplete or inaccurate child death information and inaccurate recording of death certificate data are addressed once again.

Also once again, a major recommendation is the establishment of local (county or regional) child death review teams, which would review deaths in a concurrent time frame so that all pertinent information related to the deaths could be obtained while still fresh and available. This system would assist the state CDRT by ensuring the collection of timely information, and help the local communities to recognize and take steps to correct any local systems problems and to provide prevention education to their citizens. In addition, communication and sharing of records would expedite the review process at all levels and help ensure complete and thorough review of each death by two competent panels of reviewers, one at the local level and one at the state level. Expansion of responsibilities of local teams that currently review only infant deaths to cover all child deaths for children through age six is strongly recommended as well.

The CDRT has taken a very committed and proactive approach to protecting Iowa's children. Team accomplishments other than the 332 case reviews conducted during the 1999 calendar year are highlighted in this year's annual report.

1999 Iowa Child Death Review Team Report to the Governor and the Iowa General Assembly

In 1995, the Iowa legislature authorized creation of the Iowa Child Death Review Team (CDRT). The team's responsibilities are codified in the *Code of Iowa 135.43* and rules governing its operation may be found in *Iowa Administrative Code 641-90(135).*

The *Code of Iowa* lists five major duties of the CDRT:

- Collect, review, and analyze child death certificates, data, and records, concerning the deaths of children ages six and younger, and prepare an annual report concerning the causes and manners of child deaths.
- Recommend to the governor and the general assembly interventions to prevent deaths of children.
- Recommend to the agencies represented on the CDRT changes that may prevent child deaths.
- Maintain the confidentiality of any patient records or other confidential information reviewed.
- Develop protocols and establish a committee to review child abuse investigations that involve the death of a child.

The membership of the Child Death Review Team (CDRT), method of appointment, length of term, and need for gender and political balance were defined in the legislation. The Department of Public Health was given responsibility for providing staff and administrative support. Activities completed in establishing the CDRT were described in the 1995 Report to the General Assembly, released in January 1996.

Organizations composed of the fourteen designated groups to be represented on the CDRT were contacted soon after the legislation was signed. Each organization was asked to submit the names of two or three individuals for representation on the CDRT. Names were reviewed and appointments were made by the director of public health in consultation with the director of human services. CDRT membership is balanced in gender and political affiliation. The appointed members and the professions they represent are listed in Appendix A of this report.

Seven liaisons from state government agencies represent their respective departments/offices on the team. The liaisons fully participate in CDRT meetings and are further responsible for maintaining communication and information-sharing between the CDRT and the state agencies they represent. This communication channel has proven valuable in expediting the gathering of information from the agencies. Examples of this information include driving records (Department of Transportation); accident investigation and reconstruction reports (Department of Public Safety); death certificates (Department of Public Health) and founded child abuse reports (Department of Human Services). The liaisons also explain department protocols and limitations as they apply to individual death circumstances.

An early task was the development of administrative rules, adopted and published in *Iowa Administrative Code 641-90(135).* These rules became effective in May 1996 and are included as Appendix B of this report.

The CDRT determined that its method of operation would be to review records of all Iowa residents, birth through six years of age, who died either in or out of state during the previous calendar year. It would also review records of out-of-state residents in the same age range who died in Iowa during that year. Using review tools developed by similar teams in other states as models, the CDRT developed a checklist for members to use in reviewing records. The checklist has been revised several times by the team and now encompasses the items deemed necessary by the CDRT to track each death that is reviewed.

Since the total number of deaths is larger than could be discussed during regular meetings, subcommittees continue to assist in the review.

- Herman Hein, M.D., reviews records of neonatal and infant deaths as a function of the Iowa Perinatal Program. Dr. Hein assumed this responsibility as a subcommittee of one. Dr. Hein works closely with the team coordinator to review all pertinent information regarding these children and periodically reports to the CDRT on these cases.
- The Major Case Review Committee, a multidisciplinary group of local and state agency, and health professionals, has operated for several years through the Department of Human Services. This group reviews records of child deaths resulting from child abuse or neglect and then makes

recommendations for improving the abuse/neglect investigative process. This committee was asked to serve as a subcommittee of the CDRT. Through a shared protocol, the Major Case Review Committee reviews these cases and provides summaries and recommendations to the CDRT. The CDRT Coordinator serves on this review team to facilitate coordination and flow of information and data collection between this subcommittee and the team.

The full CDRT reviews records of all child deaths resulting from unintentional injury, all deaths from Sudden Infant Death Syndrome and other selected deaths as recommended by the subcommittees.

The following working definition of a "preventable death," originally developed by the Arizona Child Death Review Committee, was adopted by the Iowa CDRT:

A preventable death is one in which an individual or a community could have reasonably done something that would have changed the circumstances that led to the death.

This definition is reviewed at the conclusion of every CDRT meeting to ensure its continuing appropriateness. To date, no revision of this definition has been deemed necessary by the CDRT.

As a result of the CDRT experience during 1996, a recommendation was made in the January 1997 Report to the Governor and General Assembly that two amendments be added to the *Code of Iowa 135.43* which governs the CDRT. The first amendment waives the liability of institutions providing information and records to the CDRT, thus expediting information retrieval by staff for the review process. The second suggested amendment addresses the liability incurred by CDRT members in the execution of their CDRT duties, specifically for statements and opinions rendered during the case review process.

The 1997 Iowa Legislature adopted both amendments, which are codified in the *Code of Iowa 135.43.* These amendments were adopted into *Iowa Administrative Code 641-90(135)* in September 1998. The amendments are included in Appendix B.

For 1998 deaths, the CDRT identified 332 child deaths that fit the review criteria. Of these deaths, 318 were Iowa residents and 14 were out-of-state residents who died in Iowa. The CDRT completely reviewed available records for 90 (27%) of these 332 deaths. One of the team's subcommittees reviewed the remaining 242 deaths.

The CDRT met eight times in 1999 with an average attendance of 74%. At each meeting members divided into work groups, each of which reviewed three to five records of child deaths and later discussed with the entire team the circumstances of the deaths and actions that might have prevented them. Recommendations are summarized and discussed in each year's report to the governor and general assembly.

RECOMMENDATIONS FOR PREVENTION OF FUTURE DEATHS

Based on case reviews of 1995, 1996, 1997 and 1998 child deaths, the Child Death Review Team has developed recommendations which, if adopted, could lead to a reduction in deaths of children in future years. These recommendations are not case-specific, but are intended to deal with a broad range of situations. The recommendations are made in two parts: to the Governor and the Iowa General Assembly, and to various state agencies. In every instance, we have established a rationale for the recommendation through an introductory background statement. Some of these recommendations were made in the past three annual reports but were not acted upon. Reviews of the 1998 deaths showed that these recommendations continue to be viable suggestions for saving the lives of Iowa's children, and so they are again included in our annual report and are noted as having been made in previous years.

Recommendations to the Governor and the Iowa General Assembly

Background Statement 1. Members of the CDRT review all pertinent information available for each child death in order to confirm the manner and cause of death, and to form recommendations as to how the death may have been prevented. In 1996, an Infant Death Scene Investigation Protocol and Report Form were adopted statewide after a six-month pilot in ten of Iowa's counties. Extensive education about the protocol and a supply of the forms were distributed to all county medical examiners. **Use of the report form is strongly encouraged, but its use is not mandated throughout the state.**

To correctly determine the cause of death for children less than one year of age at death, especially for infants who die from Sudden Infant Death Syndrome (SIDS), a complete death scene investigation is vital. The nationally adopted definition of SIDS substantiates this need: *Sudden Infant Death Syndrome is the sudden and unexpected death of an apparently healthy infant that remains unexplained after a thorough post mortem, death scene investigation and case history.* By definition, the lack of a death scene investigation report hampers assignment of SIDS as a cause of death by the CDRT during its review process. In addition, vital information that is gathered at the scene and included on the Infant Death Scene Investigation Report Form helps to assess how that death might have been prevented, if at all.

In 1997, Centers for Disease Control and Prevention (CDC) adopted and published their own Death Scene Investigation Protocol and Report Form for infant deaths. Iowa's form served as one of the models for the CDC's version. CDC advocates mandatory use of a death scene investigation protocol and report form for all infant deaths. To date, 24 states have mandated use of this type of infant investigation protocol and report form. This number has increased from 21 in 1998.

Recommendation 1. (This recommendation was the primary recommendation made in the December 1998 annual report. To date, it has not been acted upon.) The Child Death Review Team recommends mandatory use of Iowa's Infant Death Scene Investigation Protocol and Report Form by all county medical examiners in cases of infant death where the cause of death is suspected as SIDS or is undetermined at the time that the death occurs. The county medical examiner should be required to file this standardized Infant Death Scene Investigation form along with the M.E.I. report in the State Medical Examiner's Office within four weeks following the child's death.

Background Statement 2. Although the 332 children who died in 1998 died from multiple and diverse causes, many of the deaths could have been prevented. The preventable group would theoretically include all unintentional accidents, all homicides, and a significant number of incidents of SIDS and prematurity. The CDRT has been concerned about the widespread lack of knowledge and common sense exhibited by the parent(s) of many of the children. The mobile environment in which we now live and the burgeoning frequency of single parent families have given us a new culture of unprepared and unmentored parents. Even when extended family may be present to assist parents, the knowledge base of those individuals may be limited as well. Due to various combinations of ignorance, isolation and geographic or emotional alienation from traditional sources of help, many parents simply don't know what to expect from a child, what to do for or with a child or where to go for help and accurate, up-to-date information.

During the 1998 legislative session, the Iowa Legislature passed legislation to create an Iowa Empowerment Board and local Community Empowerment Areas. The purpose of this empowerment initiative is to create a partnership between communities and state government in order to promote the well-being of families with young children ages 0 - 5 years. Community empowerment areas enable local residents to lead collaborative efforts to identify and evaluate concerns that affect the health and future progress of young families in their geographical area, and to plan and implement comprehensive programs to address these concerns. Funding for area programs is awarded through grants from the state. In the 1999 legislative session, it was recommended by the Governor and later confirmed in the *Iowa Code* that communities seeking empowerment dollars should consider devoting up to 60% of the funds to home visits to **all** families of newborn infants. Thus all new families, despite their economic or educational level, would receive up-to-date information on child rearing and appropriate health information for young children.

Each community is free to determine what collaborations of local entities best fits their needs and which service delivery model would work best for them. One of the primary models currently being used in several communities across Iowa is the Healthy Opportunities for Parents to Experience Success (HOPES) program. This model is a home visitor program currently available in several Iowa counties, although it is a program separate from the empowerment initiative at this

point in time. It follows a model of family needs assessment at the time a child is born. Those families at highest risk of dysfunction receive long-term (up to three years) services to assist parents in developing optimal parenting skills, health knowledge and ability to appropriately identify and access needed community services.

Recommendation 2. The CDRT recommends expansion of the Community Empowerment Initiative so that it may eventually be implemented throughout Iowa. The CDRT especially advocates implementation of Community Empowerment Initiatives that devote approximately 60% of their funds to home visits for all families with a newborn child so that each family may become educated in appropriate health and welfare practices relating to infants and young children. Education and mentoring of this type may ultimately result in a reduced number of deaths of Iowa children that are a consequence of inappropriate or inattentive parental supervision and care. The CDRT further recommends that an annual increase of funding in the amount of $5 million per year be allocated to the Empowerment Initiative until all areas of the state are involved in a local empowerment program of assessment and action.

Background Statement 3. The CDRT has chosen to conduct retrospective reviews of child deaths. This method was selected so that all records related to the child, such as autopsies and law enforcement investigations, would be complete prior to the reviews. The drawback to this method is that if some part of the death investigation was not adequately completed or if questionable information exists on reports, it is most likely too late to gather that information. In addition, with a retrospective review system, follow-up checks on the safety of surviving siblings, the involvement of vital community agencies in the investigation or public education endeavors cannot be accomplished in a timely enough manner.

Several states, notably North Carolina, Colorado and Missouri, have developed statewide systems of county multidisciplinary child death review teams. These teams meet immediately following the death of a child to pool their information, share what has been done for a thorough review of the circumstances of the death, determine what else needs to be done, conduct public education activities for prevention of future child deaths and send reports of their reviews to the state child death review team. Communication and sharing of records expedites the review process at all levels and helps assure complete and thorough review of each death by two competent panels of reviewers, one at the local level and one at the state level.

By 1998, only four Iowa counties (Polk, Woodbury, Dubuque and Scott) had developed local review teams. Most of these teams review only infant deaths or child abuse-related deaths. In 1999, Pottawattamie County developed a multi-disciplinary team that will address all child deaths through age six years. Polk County revised its purview in 1999. Polk County's CDRT will now review cases of children through age six years who die in Polk County from causes other than prematurity and congenital defects. As with the state team, the focus of these five local teams is to use what is learned from reviews to prevent future deaths.

Recommendation 3. (This recommendation was also made in the January 1997 and 1998 and December 1998 reports.) The CDRT recommends establishment of a statewide system of local or regional child death review teams, which would review deaths of all children through age six and share their findings and information with the state team. It is further recommended that these teams be permitted the same statutory authority given to the state CDRT to gather and review information related to child deaths. During 1999, the CDRT established contacts in Iowa counties (Black Hawk, Johnson, Linn and Pottawattamie) which have consistently had ten or more child deaths annually but have not yet established a local or regional child death review system to discuss the need for a local review team. Contact by the CDRT of these counties was recommended in the December 1998 report. Representatives from Linn, Black Hawk and Pottawattamie counties met with the CDRT team members and representatives from the four established local teams in January 1999. Johnson County sent no representative to the meeting. Members of the state CDRT and of the existing local teams shared procedures that their teams follow. Members of the CDRT explained the advantages of establishing a local team, reasons to expand current team purviews to cover child deaths through age six and potential outcomes if local teams existed. The CDRT pledged on-site and telephone assistance to the local entities that are willing to implement their own review system and cooperatively share information.

It is further recommended that communities that have either established their own local child death review team or that participate in a regional team be given extra points during review of their application for Community Empowerment funds. A thorough understanding of the causes and types of child deaths in an area may help identify needs to be addressed when developing a Community Empowerment Program aimed at infants and young children.

Background Statement 4. Iowa law mandates that children up to the age of six years must be properly restrained when they are passengers in a motor vehicle. When young children die in motor vehicle crashes, and they are not properly restrained, the driver of the vehicle in which the child rode is usually not charged with violating this law. Apart from the issue of responsibility for causing the accident, it does not appear that the child restraint issue is routinely considered. However, the driver of the car in which the child was a passenger is the individual who should be given the ultimate and final responsibility for carrying unrestrained or improperly restrained child passengers, regardless of whether the driver caused the accident. In addition, aside from possible injuries faced should an accident occur, children who are not properly restrained face potential nonfatal injuries when the driver accelerates or stops suddenly. Currently, Iowa imposes a $25 fine on an operator of a motor vehicle who has an improperly restrained passenger under the age of six in their vehicle.

Recommendation 4. (This recommendation was made in the December 1998 report.) The CDRT recommends raising the fine for driving with an improperly restrained child under six years of age in a motor vehicle to $100. Stricter penalties and enforcement of this magnitude of a fine should help deter drivers from having improperly restrained children in their moving vehicles and would not necessitate an accident before the issue of prevention is addressed by law enforcement.

Background Statement 5. Although Iowa law mandates that an autopsy be performed in all cases of suspicious deaths of children under the age of two years, county medical examiners do not always require that these autopsies be performed. Toxicology studies on the child and people in the household vehicle are infrequently ordered. Reviews by the CDRT have indicated that in a significant number of deaths whose manner was designated as natural, accidental or homicide, and where no autopsy or toxicology study was performed, questions were raised about the possibility that a child had been physically abused or exposed to drugs prior to its death. While autopsies would not have prevented the deaths of these children, it is highly possible that evidence of previous injuries or drug exposure would have been identified. Thus, perpetrators would have been prosecuted, and other children in the household could have been removed from unsafe situations in a timely manner. Further, toxicology studies are not always performed on the caretakers or drivers of vehicles involved in the deaths of these children, resulting in failure to identify the effects of drugs or alcohol on the deaths and the ability of law enforcement officials to follow up on these factors.

Recommendation 5. (This recommendation was also made in the January 1997 and 1998 and December 1998 reports.) The CDRT recommends that the performance of an autopsy including toxicology studies be required for every death of a child through age six with the exception of children who are known to have died of a disease process while attended by a physician. In addition, we recommend full-body x-rays of the bodies of children who die before their second birthday, and immediate drug screens of caretakers and people having access to the child prior to the death.

Background Statement 6. Medical research and the resulting publications have long substantiated the role of secondhand tobacco exposure in the deaths of infants, primarily from prematurity and Sudden Infant Death Syndrome. Smoking during pregnancy has been shown to be a major risk factor for both premature birth and SIDS. When prone sleeping position is removed as a risk factor for SIDS, smoking emerges as the next most significant risk for Sudden Infant Death Syndrome.

Although birth certificates have a place to record the use of tobacco by the mother during pregnancy, this information may not be recorded or may be inaccurate due to the mother's unwillingness to admit to a behavior that could be harmful to her child in utero. Exposure of an infant to secondhand smoke either at home or at a daycare provider's residence may be noted on an Infant Death Scene Investigation, if one is done; but this information has usually been sketchy.

Recommendation 6. (This recommendation was also made in the December 1998 report.) The CDRT recommends the performance of cotinine (a metabolite of nicotine) testing on all infants who die in Iowa to accurately determine the potential role of tobacco exposure as a risk factor in their deaths. It is suggested that funding for this testing should come from state taxes on tobacco products. This information would prove invaluable in planning and directing future anti-smoking education efforts statewide and more accurately assessing the influence that tobacco exposure has on Iowa's infant mortality rate since accurate assessment by birth certificate is currently not feasible.

Background Statement 7. Although efficient reporting of out-of-hospital deaths and other county medical examiner cases is requested from county medical examiners, current reporting can take months or longer to be reported to the State Medical Examiner's office. This delay in reporting causes inaccurate statistical reporting to other agencies and delays the collection of autopsies and other reports for the CDRT to review.

Recommendation 7. The Child Death Review Team recommends that every child death that is a medical examiner's case be reported on a Medical Examiner I report form to the State Medical Examiner's office within four weeks of its occurrence. The final autopsy and toxicology results should be submitted within two months of the child's death unless special laboratory tests delay this process. It is recommended that all results be submitted within six months of the child's death.

Background Statement 8. The state currently reimburses counties $400 for any autopsy done on an infant who dies from Sudden Infant Death Syndrome. The actual costs for this type of an autopsy most usually exceed $1,500 to perform when required x-rays and toxicology tests are taken into consideration. This poor reimbursement places a burden on any county where a SIDS infant dies. In addition, no reimbursement is made for transporting the body to another city or county where a deputy state medical examiner has agreed to perform the autopsy. Since only five deputy state medical examiners currently exist in the state, the body may need to be transported a considerable distance for the procedure.

Recommendation 8. The Child Death Review Team recommends reimbursement for actual expenses incurred for the performance of an autopsy, x-rays and toxicology tests on an infant who dies from Sudden Infant Death Syndrome be made to any county in which a SIDS death occurs. The limit for this total reimbursement should be $1,700. In addition, the CDRT recommends up to $600 reimbursement for transportation of the body to the autopsy site.

RECOMMENDATIONS TO STATE AGENCIES

Background Statement 1. Death certificates need to be filled out completely and accurately by funeral home directors, attending physicians and county medical examiners; and the final manner and cause of death needs to be filed in a timely manner. The information death certificates contain is vital to the Iowa Department of Public Health Bureau of Vital Records, the CDRT and other programs compiling incidence and demographic reports for state and federal agencies about deaths occurring in Iowa. When death certificate information is incomplete, incorrect, or missing, all aspects of their use are threatened.

Efforts are ongoing within the Iowa Department of Public Health Bureau of Vital Records to ensure complete and accurate reporting. The bureau is currently implementing electronic filing of death certificates. This project will improve timeliness and accuracy of death reporting to the state.

Recommendation 1 - *to the Iowa Department of Public Health Bureau of Vital Records.* The CDRT recommends that efforts be ongoing and increased to educate those individuals responsible for completing and filing death certificates in their responsibilities and the need for accurate and complete information and timely filing. The team further recommends that available sanctions be enforced for individuals who fail to adequately perform these duties. (This recommendation was also made in the January 1997 and 1998 and December 1998 reports.)

Background Statement 2. Attending physicians and county medical examiners often fail to complete those areas on the death certificate in which they should identify the underlying cause(s) of death in all manners of death, as well as location, time and brief details of accidental or homicide deaths. Delays in the filing of death certificates are almost exclusively the result of delays by physicians in completing and signing their areas. County medical examiners may sign a death certificate listing the manner of death as "pending further investigation" and fail to file an amended certificate listing the finally determined manner and cause. In order to meet its state and federal reporting obligations, the Bureau of Vital Records must close its files on deaths by June 30 of the year following the year in which the deaths occurred. For accuracy

of state reports and identification of problems and trends, original death certificates and amendments must be filed according to that timeline.

In March 1997, the State Medical Examiner's office began gathering information regarding timeliness and completeness of the "Report of Investigation by Medical Examiner" as well as autopsies. Letters are sent to those county medical examiners not meeting compliance criteria.

Recommendation 2 - ***to the Office of the State Medical Examiner.*** **The CDRT recommends increased efforts to obtain from attending physicians and county medical examiners timely, complete and accurate information on autopsies, death certificates and amendments. (This recommendation was also made in the January 1997 and 1998 and December 1998 reports.)**

Background Statement 3. When children die as a result of their parents' ignorance, neglect or aggression, there are often surviving siblings and unrelated children residing in the home. During reviews of such deaths, the CDRT has expressed concern for the safety and well-being of these surviving children.

When the Department of Human Services is notified about the death of a child, caseworkers assess the needs of the surviving children.

Recommendation 3 - ***to the Iowa Department of Human Services, Office of Field Support.*** **When a child dies due to a parent's or a caretaker's ignorance, neglect or aggression, the CDRT recommends that ongoing efforts be made to visit the surviving children in the home within one month to assess the safety and well-being of these children and enable voluntary referrals to appropriate services. This visit is to be completed by DHS caseworkers knowledgeable in family dynamics and child abuse/neglect. (This recommendation was also made in the January 1997 and 1998 and December1998 reports. Although it is again reiterated in this year's report, it is recognized that the Iowa Department of Human Services has made great progress in addressing this issue. The assessment approach is now being used statewide to respond to reports of child abuse. The assessment approach mandates evaluating the alleged abuse, taking needed actions to safeguard the child and engaging the family in services to enhance family strengths and address identified needs. This approach facilitates the provision of needed services to children and families.)**

Background Statement 4. Many municipalities require the presence of smoke alarms in rental property, and it is generally recognized that smoke alarms can significantly reduce the number of deaths due to inhalation or burns in house fires. Unless a municipality also requires annual inspection of the smoke alarms, they may be nonfunctional due to dead batteries or other defects, rendering them useless. There is no inspection requirement for smoke alarms in private dwellings or in rental units located in unregulated areas. In addition, other problems that threaten the safety of residents may be observed during home visits.

Recommendation 4 - ***to all state agencies and their local units or contractors which conduct activities in the homes of their clients/customers.*** **The CDRT recommends that the state agencies require each local unit or contractor, whenever conducting activities in the homes of their clients or customers, to check for the presence and operating status of smoke alarms, the presence of other safety hazards; and to recommend to residents when repairs, changes or replacements are needed. (This recommendation was also made in the January 1997 and 1998 and December 1998 reports.)**

Background Statement 5. Because of the stress and immediacy that surrounds an accident or other circumstance involving the death of a child, the agencies responding to the death scene are often so engrossed in conducting their official duties and completing their required reports that some critical information about the death scene, circumstances and involved people is often not documented.

To encourage gathering of this information, the Iowa Department of Public Health and the State Medical Examiner developed in 1995, and implemented statewide in 1996, an investigation protocol and form for documenting observations and findings about the scene of an infant death and the child's parents and caretakers. This information was distributed to emergency response units, law enforcement agencies, fire departments and county medical examiners. Completion of the form is voluntary, and many areas have been slow to adopt its use. In many instances where the form is used and submitted to IDPH, there is still much missing information. Examples of important observations that are frequently not recorded include:

- use or non-use of appropriate vehicle occupant restraints;
- position of the child when found;
- child's type and condition of clothing;
- observation of drug, alcohol or tobacco use;

- description of the temperature of the child's body; and,
- emotional affect of adults and children at the scene.

Such information is of great importance to those who later investigate the death, as well as to the CDRT in its reviews. In addition, since many counties and communities rarely have an infant death in their jurisdiction, death scene personnel may not get experience with the protocol and report forms. Therefore, they may not complete the information adequately, if at all.

Recommendation 5 - *to the Iowa Department of Public Health Bureau of Emergency Medical Services and the Iowa Department of Public Safety.* The CDRT recommends that all emergency response units, law enforcement agencies and fire departments follow the Infant Death Scene Investigation Protocol, and that the report forms be filled out and submitted as quickly as possible to the proper entity. It is further recommended that information regarding use of this protocol and report form be included in the curriculum of the Iowa Law Enforcement Academy and in all programs in the state that train emergency medical services and fire fighting personnel. It should be noted that the CDRT developed a pocket-size reference card that summarizes the needed information from the Death Scene Investigation. These cards were distributed by IDPH, along with a copy of the form and protocol, to all Police, Sheriff and Department of Criminal Investigation offices throughout Iowa. (This recommendation was also made in the January 1997 and 1998 and December 1998 reports.)

Background Statement 6. Although Iowa law now waives the liability of institutions within the state in releasing information to the CDRT, difficulty still exists in obtaining information regarding Iowa children who die out of state or were medically treated out of state and for non-Iowa residents who die in Iowa. In particular, out-of-state death certificates and hospital medical records are very difficult for the CDRT staff to obtain. Most of the institutions and state agencies require a parent-signed release form to release information to Iowa's CDRT. Improved access to medical records across state lines would facilitate operation of the CDRT and help provide team members with more complete information for case review.

Recommendation 6 - *to the Commission of Uniform State Laws.* The CDRT recommends that the Commission of Uniform State Laws propose legislation in this state and promote the passage of legislation in other states which would facilitate the exchange of medical, investigative or other information pertaining to a child death. Such legislation should include the following language: "A person in possession or control of medical, investigative or other information pertaining to a child death and child abuse review shall allow the reproduction of the information by the Child Death Review Team of another state operating substantially in conformity with the provisions of this chapter, to be used only in the administration and for the duties of that Child Death Review Team and provided that state grants reciprocal exchange of such child death information to Iowa's Child Death Review Team. Information and records which are otherwise confidential remain confidential under this section. A person does not incur legal liability by reason of releasing information to a Child Death Review Team as required under this section." It should be noted that the CDRT has contacted representatives from other Child Death Review Teams in all states that border Iowa. A meeting of Iowa's CDRT and these representatives will be held in Des Moines in April 2000. One of the main objectives of that conference is to discuss better sharing of information among states. (This recommendation was also made in the January and December 1998 reports.)

Background Statement 7. Several 1997 and 1998 SIDS deaths and positional asphyxia deaths occurred at daycare provider or foster homes. The major risk factor for these two causes of infant death is inappropriate sleep environment. Information collected for 1997 and 1998 SIDS and positional asphyxia cases show that most of these infants were placed on a surface other than a firm crib mattress for sleep. Most of these infants were put down in a prone position, and they may have had an adult blanket or several infant blankets in the bed with them. Very often, the childcare provider's home **was not smoke free.**

In addition, when the infant was found not breathing, the care provider often was not knowledgeable in CPR, so time elapsed between when the child was found and a trained person came to the scene to begin performing this emergency procedure.

Recommendation 7 - *to the Iowa Department of Human Services.* The CDRT recommends that all foster care parents and all licensed in-home daycare providers be required to learn and be certified in child and infant CPR and be required to be recertified in this procedure annually. In addition, foster parents and in-home daycare providers should be required to have extensive education regarding appropriate sleep practices and environment for infants. Their homes should be assessed for secondhand smoke exposure before they are accepted into the foster care program or before they can receive a license to do

in-home child care. (This recommendation was also made in the December 1998 report.)

Background Statement 8. Children may be severely injured in an accident and transported to the hospital where they eventually die of their wounds. Details of the circumstances surrounding this type of death have consistently been sketchy in hospital and EMT reports collected by the CDRT for review. Most usually, law enforcement personnel do not follow up on these cases since the child did not die the day of the accident. Any potential child abuse that could have been involved and any strategies for preventing future deaths are difficult to ascertain when information is inadequate.

Recommendation 8 - *to the Department of Public Safety.* The CDRT recommends follow up by law enforcement officers of all cases involving potentially life-threatening injuries resulting from any accident for all children through six years of age. In the event that an injured child shall die either in-state or out-of-state from an injury that occurred in their jurisdiction, a thorough investigation of the circumstances surrounding the accident should be conducted by law enforcement personnel.

Background Statement 9. Many healthy infants die in Iowa each year from Sudden Infant Death Syndrome, positional asphyxia and suffocation. All too often, risk factors that are potentially related to the deaths can be identified. These risk factors include prone sleeping position, soft, porous baby or adult bed covers, inappropriate sleeping surface such as an adult bed, waterbed, recliner, or sofa, prenatal and/or second-hand smoke exposure. Many infants succumb while co-sleeping with parents, since a sound-sleeping adult may roll over onto the child and adult beds contain heavy, porous bedding materials. Good and caring parents may simply be unaware of the potential hazards that these environmental circumstances may pose.

Recommendation 9 - *to the Iowa Department of Public Health.* The CDRT recommends enhanced educational efforts statewide to parents and other care providers, and to health care professionals who regularly come in contact with new parents and grandparents. This education should focus on all risk factors related to an infant's sleep environment and on issues related to tobacco exposure both in utero and after birth.

CHILD DEATH REVIEW TEAM ACCOMPLISHMENTS

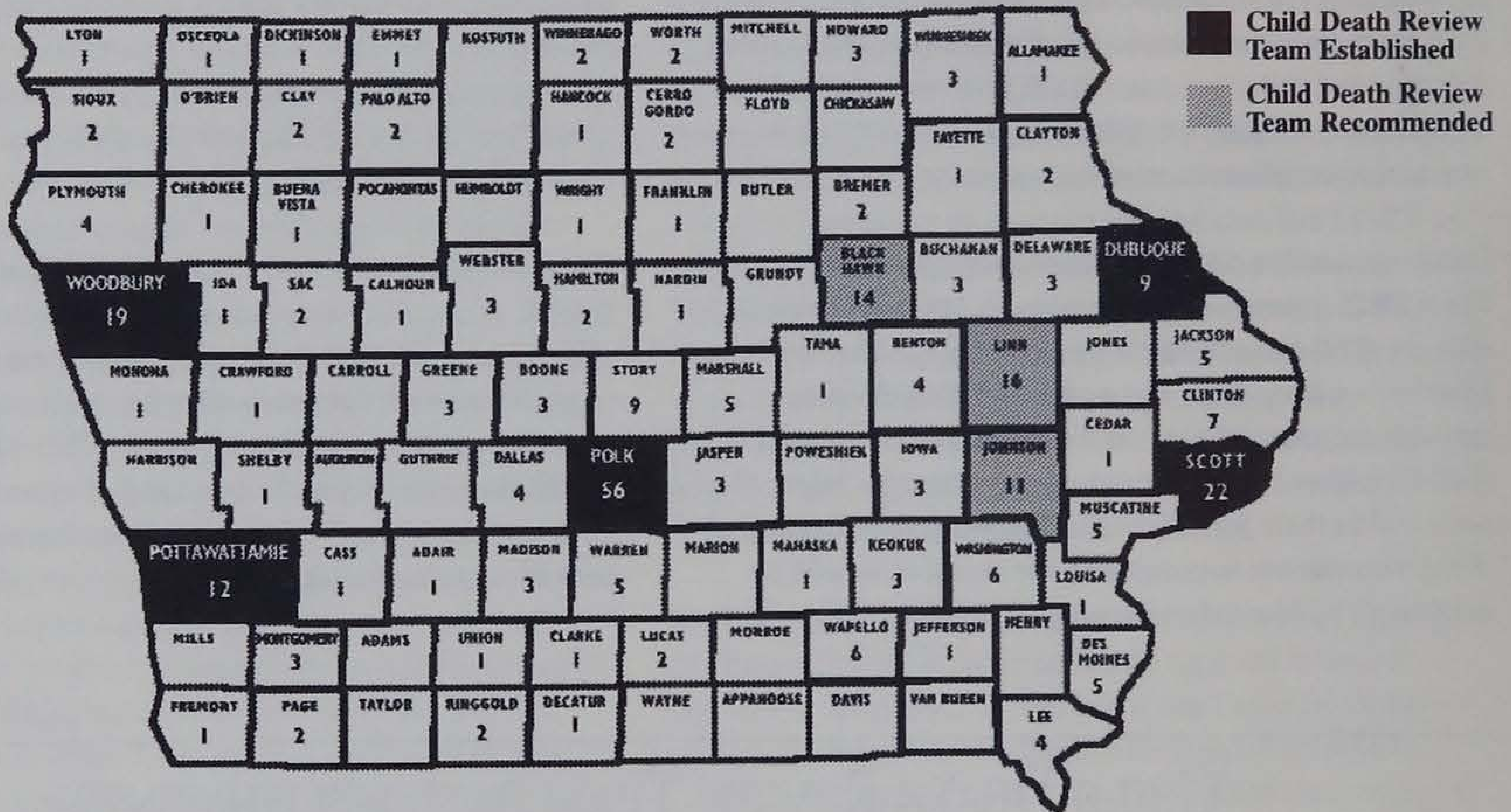
During the 1999 calendar year, the members of the CDRT took a very serious and proactive approach toward accomplishing some of the goals set out in past reports. These accomplishments focused primarily on education, meetings, and awareness building activities.

Specifically, in addition to reviewing 332 cases, the members of the CDRT:

- Met with the outgoing governor to review the original intent of the team's establishment and his suggestions for getting recommendations acted upon.
- Met with incoming Lieutenant Governor Sally Pederson to explain the team's charge, past review findings, and current recommendations and to solicit support from the new administration for action on the team's recommendations.
- Met with representatives of Pottawattamie, Linn, Scott, Polk and Black Hawk counties to urge establishment of a local CDRT and pledge assistance in developing such a team.
- Made initial contacts with CDRTs in surrounding states (Kansas, Illinois, Missouri, Nebraska, Wisconsin and Minnesota) to discuss a regional meeting to be held in Des Moines on April 13, 2000.
- Developed and distributed, with the assistance of the Iowa Department of Public Health, pocket-sized emergency response cards which summarize death scene investigation criteria to go to all Iowa sheriffs, DCI officers and police officers.
- Gave numerous lectures to law enforcement personnel, emergency medical personnel, attorneys, health professionals and daycare providers on death scene investigation procedures, risk factors for SIDS, hazards of prenatal and secondhand smoke and other related topics.
- Participated in a press conference that highlighted the significant increase in SIDS deaths statewide during the first half of 1999.
- Surveyed all hospitals in Iowa that provide obstetrical care to determine what sleep environment information is being distributed to new parents and by whom.
- Distributed, with the assistance of the Iowa Department of Public Health and the Iowa SIDS Alliance, new posters and brochures to all hospitals in the state that have obstetrical units and to all WIC facilities in the state.

1998 Deaths of Children 6 Years of Age and Under by County of Residence at Time of Death

The following map shows the county of residence for Iowa children who died.



Out-of-state children who died in Iowa are as follows:

OUT-OF-STATE RESIDENTS

State	Deaths	State	Deaths
Illinois	7	Michigan	1
Nebraska	4	Kansas	1
		Wisconsin	1

Ages of Children at Death

The youngest of the 332 children who died in 1998 was minutes old; and the oldest was six years, eleven months and one day old. For this report, the three age classifications most commonly used for statistical purposes have been utilized: birth through 28th day (neonatal); 29th through 364th day (post-neonatal); and, one through six years (child).

1998 DEATHS BY AGE GROUP

Age Group	Total	Percent of 1998 Deaths
Neonatal	**179**	**53.9%**
Post-Neonatal	**79**	**23.8%**
01 Months -	18	
02 Months -	12	
03 Months -	11	
04 Months -	6	
05 Months -	6	
06 Months -	7	
07 Months -	9	
08 Months -	5	
09 Months -	2	
10 Months -	1	
11 Months -	2	
Child	**74**	**22.3%**
01 Years -	14	
02 Years -	18	
03 Years -	12	
04 Years -	11	
05 Years -	8	
06 Years -	11	

Gender

In any given time period, more male children than female children are born, and more male children than female children die. In 1998, Iowa child deaths followed this trend with 55.1% of the 332 children who died being males, and only 44.3% being females. Gender for two (0.6%) infants was not able to be determined due to their congenital malformations at birth.

DEATHS BY GENDER

Age Group	Gender	Number	Percent of 1998 Deaths
Neonatal	Male	99	29.8%
	Female	78	23.5%
	Unknown	2	0.6%
Post-neonatal	Male	43	13.0%
	Female	36	10.8%
Child	Male	41	12.3%
	Female	33	9.9%
Total Deaths	**Male**	**183**	**55.1%**
	Female	**147**	**44.3%**
	Unknown	**2**	**0.6%**
		332	**100%**

Age Groups by Race/Ethnicity and Gender

The following table shows 1998 child deaths by gender and race/ethnicity. The race/ethnicity attributed to the child is that listed on the birth certificate as the race/ethnicity of the mother.

TOTAL DEATHS BY RACE/ETHNICITY AND GENDER

Race/Ethnicity	Male	Female	% of Total	Total
White	159	126	86.5%	287
Native American	7	2	2.7%	9
Hispanic	6	8	4.2%	14
Black	9	8	5.1%	17
Asian	2	3	1.5%	5
Total	**183**	**147**	**100%**	**332**

NEONATAL DEATHS BY RACE/ETHNICITY AND GENDER

Race/Ethnicity	Male	Female	% of Total	Total
White	84	65	83.3%	149
Native American	4	1	2.8%	5
Hispanic	3	5	4.5%	8
Black	7	4	6.1%	11
Asian	1	3	2.2%	4
Unknown			1.1%	2
Total	**99**	**78**	**100%**	**179**

POST-NEONATAL DEATHS BY RACE/ETHNICITY AND GENDER

Race/Ethnicity	Male	Female	% of Total	Total
White	39	30	87.3%	69
Native American		1	1.3%	1
Hispanic	1	2	3.8%	3
Black	2	3	6.3%	5
Asian	1		1.3%	1
Total	**43**	**36**	**100%**	**79**

CHILD DEATHS BY RACE/ETHNICITY AND GENDER

Race/Ethnicity	Male	Female	% of Total	Total
White	36	31	90.5%	67
Native American	3		4.1%	3
Hispanic	2	1	4.1%	3
Black		1	1.4%	1
Asian			0.0%	0
Total	**41**	**33**	**100%**	**74**

Manner of Death

The attending physician or medical examiner records the manner of death on each death certificate. Four specific manners of death are pertinent to deaths of children:

- **Natural** means the death was the result of some natural process, such as disease, prematurity/immaturity or congenital defect. Deaths by this manner are considered by the CDRT to be non-preventable, although it is acknowledged that some prematurity and congenital defects may be prevented through better preconception and prenatal care and counseling. The 1998 CDRT did not address these issues.

- **Accidental** means the death resulted from some unintentional act. This manner of death is the most effectively reducible by educating parents and caretakers on more appropriate methods and actions related to child raising.

- **Homicide** means the death was caused by a criminal act. The act committed by the perpetrator may not have been intended to cause the child's death.

- **Undetermined** means that investigation of the circumstances and examination through autopsy did not clearly identify the way in which the death occurred. In this category, we include deaths attributed to Sudden Infant Death Syndrome since this cause is determined by the absence of other signs rather than by a clearly identified finding.

Death certificates for the 332 child deaths in 1998 show manner of death as follows:

MANNER OF DEATH

Manner	Number	% of Deaths
Natural	254	76.5%
Accident	36	10.8%
Homicide	7	2.1%
Undetermined	35	10.5%
Total	**332**	**100%**

Causes of Death

Death certificates identify the immediate cause of death and, where it can be determined, one or more conditions leading to the immediate cause (*i.e.*, the immediate cause of death was due to or a consequence of some other disease or condition). Because the immediate cause in most instances is cardiac and/or respiratory arrest, we have followed the usual death analysis procedure of using the underlying cause (the disease or injury that initiated events resulting in the death) for our data and analyses. When the team reclassified the manner or cause of death, analyses are based upon manner and cause of death as determined by the CDRT through case reviews. **Note:** Case determinations were based on evaluations of all materials available at the time the reviews were conducted.

Natural

The majority of the 254 deaths in this group were due to five causes: prematurity; congenital defects that were incompatible with life or following treatment to correct the defect; birth complications; infections; and forms of cancer. As demonstrated in the following table, the predominant two causes of natural deaths were prematurity and congenital defects. The 254 natural deaths comprised 76.5 percent of all 1998 child deaths. Deaths from Sudden Infant Death Syndrome (SIDS), although coded as natural on death certificates, are considered separately in this report as part of the undetermined category.

CAUSES OF NATURAL DEATHS

Cause	Number	% of Natural Deaths	% of All Deaths
Prematurity	121	47.6%	36.4%
Congenital Defects	91	35.8%	27.4%
Infection	22	8.7%	6.6%
Birth Complications	8	3.2%	2.5%
Cancer	9	3.5%	2.7%
Respiratory	1	0.4%	0.3%
Other	2	0.8%	0.6%
Total	**254**	**100%**	**76.5%**

AGE GROUPS AND CAUSES OF NATURAL DEATHS

Cause	Neonatal	Post-Neonatal	Child	Total
Prematurity	112	9		121
Congenital Defects	51	26	14	91
Infection	2	5	15	22
Birth Complications	8			8
Cancer		1	8	9
Respiratory			1	1
Other	1	1		2
Total	**174**	**42**	**38**	**254**
% of Natural Deaths	**68.5%**	**16.5%**	**15.0%**	**100%**

Accidental

In 1998, the deaths of 36 children resulted from accidental (unintentional) trauma. In 1997, 27 children died from accidental trauma. Accidents comprised 10.8 percent of the 1998 child deaths. The major causes involved motor vehicles (27.7% of accidental deaths), drowning (27.7% of accidental deaths) and house fires (13.9% of accidental deaths). Accidental trauma is considered preventable; but to prevent it requires the efforts of many people including the victim, the family and the community. Education of the community, parents and care providers can help prevent accidental trauma deaths among children.

CAUSES OF ACCIDENTAL DEATHS

Cause	Number	% of Accidental Deaths	% of All Deaths
Burns	1	2.8%	0.3%
Drowning	10	27.7%	3.0%
Gunshot Wound to Head	2	5.6%	0.6%
Head Injury-Falling Object	2	5.6%	0.6%
House Fire	5	13.9%	1.5%
Motor Vehicle Collision	10	27.7%	3.0%
Positional Asphyxia	1	2.8%	0.3%
Strangulation	2	5.6%	0.6%
Suffocation	3	8.3%	0.9%
Total	**36**	**100%**	**10.8%**

The majority (88.9%) of accidental trauma deaths occurred in children one year of age or older.

AGE GROUPS AND TYPES OF ACCIDENTAL DEATHS

Type	Neonatal	Post-Neonatal	Child	Total
Burns			1	1
Drowning			10	10
Gunshot Wound to Head			2	2
Head Injury-Falling Object			2	2
House Fire			5	5
Motor Vehicle Collision			10	10
Positional Asphyxia		1		1
Strangulation			2	2
Suffocation		3		3
Total		**4**	**32**	**36**
% of Accidental Deaths		**11.1%**	**88.9%**	**100%**

Homicide

Seven children were homicide victims in 1998. Homicides accounted for a total of 2.1 percent of child deaths in 1998. Shaken Baby Syndrome accounted for 71.4 percent of all homicide deaths.

CAUSES OF HOMICIDE DEATHS

Cause	Number	% of Homicide Deaths	% of All Deaths
Shaken Baby Syndrome	5	71.4%	1.5%
Gunshot Wound	1	14.3%	0.3%
Drowning	1	14.3%	0.3%
Total	**7**	**100%**	**2.1%**

The relationship of the victim to the individual who committed or was accused of committing the homicide varied, but the majority of these crimes was committed by the mother's male paramour.

RELATIONSHIP TO VICTIM

Relationship	Number
Father	2
Mother	1
Mother's Male Paramour	4

Most 1998 homicide deaths occurred to children over one month of age.

AGE GROUPS AND CAUSES OF HOMICIDE DEATHS

Cause	Neonatal	Post-Neonatal	Child	Total
Shaken Baby Syndrome		2	3	5
Gunshot Wound			1	1
Drowning	1			1
Total	**1**	**2**	**4**	**7**
% of Homicide Deaths	**14.3%**	**28.6%**	**57.1%**	**100%**

Undetermined

The Team determined that there were 35 fatalities for which autopsies failed to pinpoint a specific manner of death. The cause of death in the majority (32) of these deaths was found to be SIDS. The remaining three deaths were due to a variety of other causes. Undetermined manner accounted for 10.5 percent of all child deaths in children through age six in 1998.

Sudden Infant Death Syndrome (SIDS) is specified as the cause of death when all other causes have been eliminated. Though SIDS deaths are recorded on the death certificate as natural, the CDRT considers all SIDS deaths to be undetermined based on the technical definition of SIDS.

CAUSES OF UNDETERMINED DEATHS

Type	Number	% of Undetermined Deaths	% of All Deaths
SIDS	32	91.4%	9.6%
Other	3	8.6%	0.9%
Total	**35**	**100%**	**10.5%**

AGE GROUPS AND CAUSES OF UNDETERMINED DEATHS

Cause	Neonatal	Post-Neonatal	Child	Total
SIDS	3	29		32
Other		3		3
Total	**3**	**32**		**35**
% of Undetermined Deaths	**8.6%**	**91.4%**		**100%**

AGES AND GENDER OF SIDS DEATHS

Age	Male	Female	Total
Neonatal			
20 Days		1	1
22 Days	1		1
26 Days		1	1
Post-neonatal			
01 Month	3	3	6
02 Months	3	6	9
03 Months	5	1	6
04 Months	3		3
05 Months	1	1	2
06 Months	1	1	2
07 Months	1		1
Total	**18**	**14**	**32**

RACE/ETHNICITY OF CHILDREN WHO DIED OF SIDS

Race	Count	Percent
White	27	84.4%
Hispanic	0	0.0%
Black	3	9.4%
Native American	1	3.1%
Asian	1	3.1%
Total	**32**	**100%**

The majority of 1998 SIDS deaths occurred while a parent was caring for the infant, and most occurred during March. SIDS deaths usually occur during winter months. During Iowa's six coldest months (October, November, December, January, February and March), 20 SIDS deaths (62.5%) occurred.

CARE PROVIDER AT TIME OF DEATH FOR SIDS CASES		
Parent	24	75.0%
Babysitter	7	21.9%
Foster Parent	1	3.1%
Total	**32**	**100%**

SIDS DEATHS BY MONTH

Month	Deaths
January	3
February	3
March	7
April	3
May	2
June	1
July	0
August	3
September	3
October	5
November	2
December	0
Total	**32**

Risk factors for SIDS include prenatal smoking, secondhand smoke exposure after birth, soft bedding, overheating and, most especially, prone sleeping position.

PRENATAL SMOKING BY MOTHER FOR INFANTS WHO DIED OF SIDS		
Yes	14	43.8%
No	14	43.8%
Unknown	4	12.4%
Total	**32**	**100%**

SECOND HAND SMOKE EXPOSURE BY INFANTS WHO DIED OF SIDS		
Yes	10	31.3%
No	4	12.5%
Unknown	18	56.2%
Total	**32**	**100%**

BEDDING AT TIME OF DEATH FOR INFANTS WHO DIED OF SIDS		
Appropriate	6	18.8%
Inappropriate	8	25.0%
Unknown	18	56.2%
Total	**32**	**100%**

SLEEP POSITION AT TIME OF DEATH FOR INFANTS WHO DIED OF SIDS		
Face Down	16	50.0%
Side	7	21.9%
Face Up	7	21.9%
Unknown	2	6.2%
Total	**32**	**100%**

SLEEPING LOCATION AT TIME OF DEATH FOR SIDS CASES		
Adult Bed	6	18.9%
Adult Bed (Co-sleeping)	4	12.5%
Adult Bed Recliner	2	6.3%
Bassinet	3	9.4%
Crib	9	28.1%
Floor	1	3.1%
Other (Infant Seat)	1	3.1%
Other (Cradle)	1	3.1%
Other (Swing)	1	3.1%
Other (Playpen)	1	3.1%
Sofa	1	3.1%
Waterbed	1	3.1%
Unknown	1	3.1%
Total	**32**	**100%**

THERMAL ENVIRONMENT AT TIME OF DEATH FOR INFANTS WHO DIED OF SIDS		
Appropriate	3	9.4%
Inappropriate	2	6.3%
Unknown	27	84.3%
Total	**32**	**100%**

The mothers of children who died of SIDS were slightly more likely to have been married than unmarried when the child was born. The ratio of married to unmarried mothers was 1.5:1 for SIDS mothers. Mothers whose children died of undetermined manner and cause were more likely to have been unmarried at the time the child was born at a ratio of 2:1.

MOTHER'S AGE/MARITAL STATUS AT BIRTH OF CHILDREN WHO DIED OF SIDS

Age	Married	Unmarried	Unknown	Total
19 and Under	1	4		5
20 - 30	15	6	2	23
31 - 40	2	1		3
Age Unknown		1		1
Total	**18**	**12**	**2**	**32**

What Do the Data Tell Us?

Where are these deaths occurring?

Although child deaths occur in all counties of the state at one time or another, three counties have consistently experienced more than ten child deaths each year and do not yet have a local or regional child death review team: Black Hawk, Johnson and Linn. Each of these three counties contains at least one major city. With a higher number of residents in an area, more deaths would be expected to occur; so it is not surprising that these three counties accounted for 41 of the 332 (12.3%) child deaths in Iowa in 1998. Together with the five counties (Polk, Woodbury, Scott, Pottawattamie and Dubuque) that already have a local team in place, these counties account for 159 of the 332 (47.9%) total child deaths in Iowa for 1998.

How old are these children at the time of death?

The vast majority of children who die in Iowa in any given year are neonates. In 1998, 53.9 percent of the children who died in our state were between the ages of one and twenty-eight days. Slightly more infants died than children; 23.8 percent and 22.3 percent respectively. Prematurity, congenital defects and SIDS are the primary causes of death for children through age six.

Infants are more susceptible to death from congenital anomalies than older children. Though children may survive through their first month of life, most acute, underlying congenital conditions cause death by the first birthday. In addition, Sudden Infant Death Syndrome, by definition, affects only infants. Since SIDS is the leading cause of death for infants aged one month to one year, many of Iowa's infant deaths are attributable to SIDS.

Which children are likely to die?
As previously noted, more male children than female children are born, and more male children than female children die in any given year. During 1998, Iowa's child deaths followed this trend. More than half (55.1%) of the young children dying in Iowa were males. This trend held for all three age groups: neonates, infants and children.

The majority of deaths were among whites for all age groups, followed by Blacks for both neonatal and infant deaths and by Hispanics and Native Americans for child deaths. Because Iowa's population is mostly Caucasian, these findings are to be expected. Deaths among Blacks, Hispanics, Asians and Native Americans all raise the question whether prevention messages are being adequately disseminated to these often hard to reach populations or if there are barriers that must be overcome to improve educational efforts (language, cultural issues, etc.). Actual numbers of deaths for these populations remain low due to the relatively few Iowa residents in each of these ethnic/racial categories.

What are the manners and causes of death?
The four manners of death pertinent to children through age six are natural, accidental, homicide and undetermined. These manners of death were detailed in the previous section of this report.

- **Natural deaths**

Natural deaths are essentially not preventable, but can be reduced by better preconception counseling, prenatal care and education and by new disease cures. If mothers would stop smoking during pregnancy and would avoid exposure to secondhand smoke while pregnant, many infant deaths from prematurity could be prevented. The vast majority of deaths listed as natural manner are from premature births (47.6%) and congenital defects (35.8%), followed by infections (8.7%), cancers (3.5%) and then birth complications (3.2%). Strategies to reduce the large number of natural manner deaths include: better and more widespread preconception education and counseling; improved access to quality prenatal care; enhanced prenatal education **(especially smoking cessation programs);** and, expanded programs for home visits to new parents that teach when to seek medical care for children.

- **Accidental trauma deaths**

Accidental trauma deaths are a manner of death that is considered preventable. In 1998, 10.8 percent of all child deaths in children through age six were from accidental trauma such as motor vehicle collisions, drowning, house fires and suffocation. This proportion of child deaths due to accidents shows an increase of 2.0 percent over the 1997 figures. Three main causes of death resulted in the majority of 1998 accidental deaths of children through age six: motor vehicle related trauma (27.7%), drowning (27.7%) and house fires (13.9%). Two accidental manner deaths were attributable to gunshot wounds. During 1997, there were no firearm-related deaths to children through age six.

Most of the accidental trauma deaths were among children older than one year of age (88.9%) and no deaths in this manner occurred in a neonate.

Since prevention education is key to decreasing the number of child deaths from accidental trauma, prevention messages regarding appropriate infant sleeping practices, child safety restraint system use, safe water recreation activities, safe biking, fire prevention actions and firearms safety must be reinforced in every segment of Iowa's population. In addition, these messages must be carried to minority populations in their own language, if different from English, and in a culturally sensitive and aware fashion. Prevention education should continue even when the number of deaths from a specific type of accidental trauma has decreased, as in the case of firearm-related deaths which varies considerably from year to year.

A young child found a lighter in a closet in his parents' room. He played with the lighter and started a house fire. His six-year-old sibling died in the blaze. There were several founded neglect and abuse reports relating to the family, and they had received many services during the past several years.

Farm parents were working outside while their eight-year-old daughter supervised several siblings in the house. Her three-year-old brother decided to play outside and was later discovered missing. After a long search by the parents, the child was found in a hog manure pit where he had drowned.

- **Homicides**

Homicides accounted for seven deaths in 1998 as opposed to twelve in 1997. In four of the seven homicide deaths, the mother's male paramour was the perpetrator, while the father was found to be the perpetrator in two homicides. Homicide deaths are another area where prevention is possible to decrease the number of future deaths. Homicide deaths due to shaken/slammed baby syndrome indicate anger and frustration on the part of the caregiver. Five of the seven homicides involved shaken/slammed baby

syndrome. Parents and caregivers need viable and easily accessible outlets, *i.e.* respite care or someone to call when stresses of childcare escalate. Improved dissemination of information and resources to all new parents regarding parental stress and options could potentially assist in decreasing future homicide deaths of young children. A system of home visits soon after an infant's birth may help identify families and caregivers who are at high risk for not being able to deal appropriately with an infant or young child's crying, tantrums or misbehaviors.

A teenage father was caring for a toddler and her infant brother while their mother ran a short errand. The caregiver struck the toddler in the head with a full two-liter pop bottle. The mother failed to notice any unusual behavior by the toddler and put her to bed for the night without seeking medical care. In the morning, the toddler was found dead. It was later discovered that there had been a pattern of abuse of the toddler by the paramour who was not the child's father. The mother had also been abused as a child.

A toddler was taken to the emergency room with convulsions. She had supposedly been sick for a few days. The mother's paramour later said she had fallen from the sofa the previous day and hit her head. The child died from her injuries. An autopsy later showed a severe head injury and other signs of child abuse such as teeth marks that matched the paramour's dental records. Drug paraphernalia was found at the home, and the child tested positive for marijuana, most likely from exposure to adult use of it in the home.

- **Undetermined manner of deaths**

Undetermined manner of deaths includes SIDS deaths and other deaths that cannot be classified as natural, accidental or homicide deaths. Most of the deaths included in this manner are ruled Sudden Infant Death Syndrome. SIDS is certified as the cause of death when all other causes of death have been eliminated after evaluation of a thorough autopsy, death scene investigation and clinical history. SIDS is, therefore, a diagnosis of exclusion, affixed only after all known and possible causes of death have been ruled out.

Most SIDS victims are between the ages of two and four months at the time of death. For 1998 SIDS cases, over one half (56.3%) were between two and four months of age, and nearly all were (96.9%) were six months of age or younger at the time of death. Slightly more males (56.3%) than females (43.7%) died of SIDS in 1998. More SIDS infants were born to married mothers (56.3%) than to unmarried mothers (43.7%), and the majority of mothers were between the ages of 20 and 30 years at the time of the birth (71.9%).

Research has shown that placing babies on their **backs** for sleep **reduces** the incidence of SIDS deaths. The media periodically air public service announcements to inform parents and other caregivers of this simple lifesaving action, and information is posted in most medical offices and clinics. Although many people are still unaware or disbelieving, the nationwide decrease in SIDS deaths is widely attributed to this measure. This recommendation was changed from back or side sleeping position in 1996. Since the original Back to Sleep Campaign began in 1994, the number of SIDS deaths has dramatically decreased both nationally and statewide. In 1993, before the campaign began, 54 SIDS deaths occurred in Iowa, compared to 27 SIDS deaths in 1996 and 30 SIDS deaths in 1997. It should be noted, however, that Iowa's birth rate also decreased during that time. Therefore, a better way to look at this decrease is in the context of the number of annual SIDS deaths per 1,000 live births (the total number of births was 37,262 for the state of Iowa for 1998). The SIDS rates for the past six years are as follows:

1993 -1.43 deaths/1000 live births;
1994 -1.37 deaths/1000 live births;
1995 -1.22 deaths/1000 live births;
1996 - .73 deaths/1000 live births;
1997 - .82 deaths/1000 live births;
1998 - .86 deaths/1000 live births.

Of note is the national SIDS rate which is .69 per thousand live births (1997). Iowa has not yet matched this rate, and it is of considerable concern that Iowa's 1997 and 1998 rates are slightly higher than the 1996 rate. Although this increase was not statistically significant, it poses the question whether SIDS educational efforts provided by primary care providers are reaching high-risk groups across the state. Not all clinics, hospitals, child care providers and other groups who deal directly with new parents have updated brochures about back sleeping or are concerned enough about SIDS to stress the importance of proper sleep practices. Besides, smoking cessation during pregnancy and keeping infants in a smoke-free environment are not emphasized as much as back sleeping, yet research has shown smoke exposure to be a primary risk factor for Sudden Infant Death Syndrome.

For 1998, the infant's sleeping position at the time of death was known for 30 of the 32 babies who succumbed to SIDS. Of those children, 53 percent were placed down for sleep in a prone position when they died; 23 percent were placed on their

side; and the remaining 23 percent were face up. Fifty percent of the mothers of SIDS infants for whom the birth certificate recorded smoking history admitted to smoking during pregnancy. It should be noted that underreporting of smoking during pregnancy is very likely since mothers who continued habits that could be harmful to their unborn child might be unwilling to reveal that information. Of the 14 infants for whom exposure to second hand smoke was known, 71 percent were exposed to smoking in their living environment after birth. More complete death scene information would give a more precise picture of the proportion of SIDS babies who were exposed to tobacco smoke after birth.

Along with sleep position, many SIDS children were victims of other hazards in their sleep environment at the time of death. It becomes obvious that **all risk factors** for SIDS and other sleeping environment-related causes of infant death need to be addressed with parents, pregnant women, grandparents and other care providers by health professionals in an aggressive, consistent and comprehensive manner. Sleeping surface and bedding are two other well-established risk factors for SIDS. Sleeping surface was known for 31 SIDS cases. Of these infants, only 29.0 percent had been placed for sleep in a crib, and most of the other babies had been laid down on adult beds or waterbeds (35.5 %), sofas or adult recliners (9.7%) or other inappropriate sleeping surfaces. For the 14 infants for whom bedding type was known, eight had been covered with adult blankets, heavy quilts or other inappropriate bedding materials. Clearly, lack of knowledge on the part of parents or care providers poses enormous risks for infants.

A daycare provider placed a young infant, suffering a minor respiratory`infection, to bed for a nap on it's stomach on an adult bed. The usual sleeping position was on the back. There was no prenatal smoking by the child's mother and no second hand smoke exposure. The daycare provider found the child lifeless. The baby had succumbed to Sudden Infant Death Syndrome.

A four-month-old infant was placed to sleep on his side on a pillow that was laid on an adult bed at the sitter's home. An adult blanket and afghan were also present in the sleeping area. An hour later when the child was checked, the baby was found lifeless. The baby had died of Sudden Infant Death Syndrome.

During 1998, one infant died from positional asphyxia and three infants died from suffocation. These deaths were classified as accidents. These cases are noted here since the risk factors for positional asphyxia, suffocation and SIDS all center on improper sleep practices. It should be noted, however, that the accidental deaths were considered preventable if the sleep environment had been less hazardous. If appropriate sleep environment had been used for the children who died from SIDS, many lives could have been saved. However, in some cases, no environmental factors existed; and yet, the infants still succumbed to Sudden Infant Death Syndrome.

What Actions and Strategies Could Prevent Future Deaths?

Actions and Strategies that Could Prevent Future Deaths of Natural Manner

1. Both prospective parents (father and mother) should be physically mature and healthy, both prior to conception of the child and throughout the pregnancy. Damaging substances of any sort, including alcohol, tobacco, certain prescription medications and all street drugs must be avoided.

2. Prenatal care should be entered into as early as possible, and regular prenatal visits should be continued. Prenatal visits should include intensive smoking cessation counseling if the mother currently smokes. In addition, evaluation of second-hand smoke exposure to the mother should be conducted early on in the pregnancy, and the potential risks of such exposure should be carefully explained to her.

3. Prenatal visits should include patient-specific education and interventions aimed at modifiable risk factors such as tobacco, alcohol and drug use.

4. Genetic counseling, available through the University of Iowa regional clinics or private sources, should be recommended to and utilized by parents with potential genetic problems, especially to those who have given birth to children with genetic anomalies, to identify and make the parents aware of the possibilities of future problems.

5. All children should receive regular and timely wellness checkups at clinics or physicians' offices. Parents should be educated about signs and symptoms of illness in their children and indications for seeking medical attention. Families should be discouraged from using hospital emergency rooms as their only source of medical care, since many

preventive activities such as immunizations may be missed at the time of care.

6. New parents should be thoroughly instructed regarding the appropriateness and timeliness of well child checkups.

7. Iowa's hard to reach populations, such as certain cultural and ethnic communities (Amish, Hispanic and Asian, etc. populations), should have culturally-targeted education regarding the necessity for quality and timely prenatal care, the potential hazards of home births and preventive care and practices relating to young children. This education should be done in the language most used by each specific population.

Actions and Strategies that Could Prevent Future Accidental Deaths

1. Children six and under should always be properly restrained when riding in motor vehicles of any type. Care should be taken that the child restraint device being used is of the correct type (**i.e.** infant, toddler, booster) and has been properly fitted to the child. The device should also be installed properly, and the child must be correctly positioned and fastened in the restraint system.

2. Children should ride in the rear seats of vehicles and child safety door locks should be used when available. Automobiles should be kept locked when not in use.

3. Individuals who have demonstrated repeated unsafe driving should not be permitted to continue driving. Stronger penalties for multiple offense drivers should be instituted.

4. Bicycle helmet use should be required by law, and the requirement should be strongly supported by parents, teachers and caregivers.

5. Parents and other drivers should check behind **all** motor vehicles, including farm equipment, before backing up any vehicle.

6. Parents, grandparents, foster parents, daycare providers and other caregivers should learn first aid, administration of CPR and the Heimlich Maneuver for infants and children.

7. Parents and caregivers should recognize and give only age-appropriate foods to infants and children with special attention to solids given before the age of four.

8. Extreme vigilance should be practiced whenever children are in, around or near water, including bathtubs, pools and larger bodies of water regardless of the water depth. **Parents and caregivers need to be cautioned that bathtub rings are <u>not</u> safety devices and that children must never be left alone in the water, even momentarily.** Children playing near lakes, ponds and rivers should use flotation devices as a precaution. In addition, children should be taught to swim as early as possible.

9. Home pools should be surrounded by fencing and have locked gates, and wading pools should be emptied immediately after each use to prevent unsupervised play by children. Likewise, decorative ponds in residential areas should be fenced in to deter exploration by curious children.

10. Smoke alarms should be installed in every house, apartment and trailer home and checked frequently to assure their continuing operability.

11. All Terrain Vehicles should never be operated by a child under the age of twelve. Young children should not ride on All Terrain Vehicles.

12. A responsible person should supervise children at play, especially if potentially dangerous equipment or hazardous apparatus is in or near the play area. **This supervision is especially important in areas where open septic tanks, manure pits or grain bins may be accessible to the children.**

13. Firearms should be stored unloaded and in a locked receptacle, and ammunition should be stored in a separate, locked receptacle with both keys unavailable to children.

14. Children should not ride on farm equipment unless it is in a closed cab that has securely fastened doors, and they are under the direct supervision of an adult.

15. Matches and lighters should be stored in safe places, away from young children. Children should be taught the dangers of playing with these items at a very young age.

16. Children should be closely supervised by a competent adult at all times. The adult should be capable of and attuned to evaluating potential dangers in the child's environment and continually monitoring their surroundings for possible hazards.

Actions and Strategies that Could Prevent Future Homicide Deaths

1. Mothers should be cautioned about careful selection of individuals who care for their children, most especially paramours. Reports of criminal history can be obtained at reasonable charge from local police departments.

2. Inexperienced parents should be linked with a mentor or other supportive person to whom they can turn when they have questions or are stressed.

3. The frequency and content of public service announcements that illustrate the importance of parents or other caretakers taking a "time out" when the stress of child care becomes overwhelming should be improved.

4. Parents should be given a list of respite care resources/options and emergency numbers at the time of hospital discharge after the birth of every new infant. These resources should also be discussed with pregnant women at their prenatal visits.

Actions and Strategies that Could Prevent Future SIDS and Other Undetermined Deaths

1. Media efforts to promote back sleeping should be stepped up. Easy to read and understandable SIDS informational brochures and other educational materials should be widely distributed on a continual basis across the state to physician offices, public health nurses, public agencies, daycare providers, hospital OB departments and other groups who deal directly with infants and their families.

2. Every baby should have its own sleeping place and should not share a sleeping place with parents, whether a potential shared place is a bed, a couch, a chair or the floor.

3. Cribs, bassinets and other sleeping places should be checked for firmness of mattress and absence of potential causes of smothering, choking or rebreathing, such as pillows, adult blankets, wide spaces between mattress and sides, crib bumper pads, stuffed toys and small items. Sofas, adult beds and waterbeds should never be used as an infant bed or sleep surface.

4. Pregnant women, mothers, fathers and other caregivers should be counseled about smoking hazards to children, both before and after their birth.

5. Pregnant women should be counseled as to the potential negative effects on their offspring of illicit drug use and alcohol use during pregnancy.

6. Parents, grandparents and other care providers to neonates and infants should be educated about appropriate sleep position and sleep environment and hazards of secondhand smoke to young children.

7. Physicians should repeatedly counsel pregnant females and parents of very young children about SIDS risk factors, especially if the mother is very young herself, either parent smokes or the mother is not seeking consistent prenatal care.

8. Special efforts to educate non-English speaking pregnant women and their families about SIDS risk factors should be implemented.

9. Parents should be educated on selection of an appropriate daycare provider who is aware of and follows the "Back to Sleep" recommendations and who provides a smoke-free home in which to care for children.

Report to the Governor
and General Assembly

Iowa Child Death Review Team

December 1999

Appendices

Child Death Review Team Members
and the Disciplines They Represent

Eric L. Book, MD
Health Insurance Industry

Christine O'Connell Corken
County Attorneys

Joseph Cowley, PhD
Substance Abuse Counselors

Lois Fingerman
Domestic Violence

Francis Garrity, MD
State Medical Examiner's Office

Susan Gauger (to 4/99)
Social Worker

Barbara Harre, MD
Pediatrics

Herman Hein, MD
Neonatology

Mary Ann Kerr, MSN (to 8/99)
SIDS Coalition

Gerald Loos, MD
Family Practice

Jan Mackey (from 6/99)
Social Worker

Melissa Sally Mueller
Emergency Medical Services

Richard Rice
Mental Health Counselors

Fran Sadden (from 10/99)
SIDS Coalition

Lon Walker
Law Enforcement

Mona Walters
Emergency Room Nurse

State Government Liaisons

Virginia Barchman
Attorney General's Office

Charlotte Burt
Department of Education

Scott Falb
Department of Transportation

Edward Schor, MD
Department of Public Health (to 3/99)

Jill France
Vital Records, IDPH

Dan Moser
Department of Public Safety

Wayne McCracken
Department of Human Services

Valarie Campbell, MD
Department of Public Health (from 4/99)

Staff

Stephanie Pettit, PhD
Department of Public Health

CHAPTER 90
IOWA CHILD DEATH REVIEW TEAM

641-90.1(135) Purpose. The purpose of the child death review team is to aid in the reduction of the incidence of serious injury and death to children by accurately identifying the cause and manner of death of children through the age of six years.

641-90.2(135) Definitions.
"Team" means the Iowa child death review team.
"Unexcused absence" means failure by a team member to notify the chairperson of an anticipated absence from a team meeting.

641-90.3(135) Agency. The Iowa child death review team is established as an independent agency of state government. The Iowa department of public health shall provide staffing and administrative support to the team.

641-90.4(135) Membership. The membership of the review team is subject to the provisions of Iowa Code sections 69.16 and 69.16A, relating to political affiliation and gender balance. Review team members who are not designated by another appointing authority shall be appointed by the director of public health in consultation with the director of human services. Membership terms shall be for three years.

90.4(1) The review team shall include the following:

a. The state medical examiner or the state medical examiner's designee.
b. A certified or licensed professional who is knowledgeable concerning sudden infant death syndrome.
c. A pediatrician who is knowledgeable concerning deaths of children.
d. A family practice physician who is knowledgeable concerning deaths of children.
e. One mental health professional who is knowledgeable concerning deaths of children.
f. One social worker who is knowledgeable concerning deaths of children.
g. A certified or licensed professional who is knowledgeable concerning domestic violence.
h. A professional who is knowledgeable concerning substance abuse.
i. A local law enforcement official.
j. A county attorney.
k. An emergency room nurse who is knowledgeable concerning the deaths of children.
l. A perinatal expert.
m. A representative of the health insurance industry.
n. One other appointed at large.

90.4(2) Vacancies shall be filled in the same manner in which the original appointments were made. An appointment shall complete the original member's term.

90.4(3) Three consecutive unexcused absences shall be grounds for the director to consider dismissal of the team member and to appoint another. The chairperson of the team is charged with providing notification of absences.

641-90.5(135) Officers. Officers of the team shall be a chairperson and a vice chairperson and shall be elected at the first meeting of each fiscal year unless designated at the time of appointment. Vacancy in the office of chairperson shall be filled by elevation of the vice chairperson. Vacancy in the office of vice chairperson shall be filled by election at the next meeting after the vacancy occurs. The chairperson shall preside at all meetings of the team, appoint such subcommittees as deemed necessary and designate the chairperson of each subcommittee. If the chairperson is absent or unable to act, the vice chairperson shall perform the duties of the chairperson. When so acting, the vice chairperson shall have all the powers of and be subject to all restrictions upon the chairperson. The vice chairperson shall also perform such other duties as may be assigned by the chairperson.

641-90.6(135) Meetings. The team shall meet upon the call of the chairperson, upon the request of a state agency or as determined by the team. Robert's Rules of Order shall govern all meetings.

641-90.7(135) Expenses of team members. The members of the team are eligible for reimbursement of actual and necessary expenses incurred in the performance of their official duties.

641-90.8(135) Team responsibilities. The team shall perform the following responsibilities.

1. Collect, review and analyze child death certificates and child death data, including patient records or other pertinent confidential information concerning deaths of children aged six or younger and other information as the review team deems appropriate for use in preparing an annual report to the governor and the general assembly concerning the causes and manner of child deaths. The report shall include analysis of factual information obtained through review and recommendations regarding prevention of child deaths.
2. Recommend to the governor and the general assembly interventions to prevent deaths of children based on an analysis of the cause and manner of such deaths.
3. Recommend to the agencies represented on the review team and to other agencies changes which may prevent child deaths.
4. Maintain the confidentiality of any patient records or other confidential information reviewed.
5. Develop protocols for and establish a committee to review child abuse investigations which involve the death of a child.
6. The team may establish subcommittees to which the team may delegate some or all of the team's responsibilities set out in this rule.

641-90.9(135) Liaisons. The following individuals shall each designate a liaison to assist the team in fulfilling its responsibilities.

1. Director of public health.
2. Director of human services.
3. Commissioner of public safety.
4. Administrator of the bureau of vital records of the Iowa department of public health.
5. Attorney general.
6. Director of transportation.
7. Director of the department of education.

641-90.10(135) Confidentiality and disclosure of information. The team and liaisons shall maintain the confidentiality of all information and records used in the review and analysis of child deaths, including disclosure of information which is confidential under Iowa Code chapter 22 or any other provisions of state law. No information on individual deaths contained in the records described in this rule shall be disclosed except for the purposes of the team, committee or subcommittee meeting; and no confidential information received in preparation for or during the course of such meeting shall be removed from the meeting room except for further review as authorized by the team chairperson.

In preparation for review of an individual death by the team or its authorized committee or subcommittee, the chairperson of the team or the chairperson's designee is authorized to gather all information pertinent to the review. This information may include, but is not limited to, hospital records, physician's records, school records, day-care records, autopsy records, child abuse registry, investigation or assessment records, state public assistance records, traffic records, public safety records, law enforcement records, fire marshal's records, birth records, death records and other relevant records necessary to conduct a complete review.

A person in possession or control of medical, investigative or other information pertaining to a child death and child abuse review shall allow the inspection and reproduction of the information by the department upon the request of the department to be used only in the administration and for the duties of the Iowa child death review team. Information and records which are confidential under Iowa Code section 22.7 and chapter 235A, and information or records received from the confidential records remain confidential under this rule. A person does not incur legal liability by reason of releasing information to the department as required under and in compliance with this rule.

641-90.11(135) Immunity and liability. Review team members and their agents are immune from any liability, civil or criminal, which might otherwise be incurred or imposed as a result of any act, omission, proceeding, decision, or determination undertaken or performed or recommendation made as a review team member or agent provided that the review team members or agents acted in good faith and without malice in carrying out their official duties in their official capacities. A complainant bears the burden of proof in establishing malice or lack of good faith in an action brought against review team members involving the performance of their duties and powers.

A person who releases or discloses confidential data, records or any other type of information in violation of this chapter is guilty of a serious misdemeanor.

These rules are intended to implement Iowa Code Supplement section 135.43.
[Filed 3/15/96, Notice 1/31/96-published 4/10/96, effective 5/15/96]
[Filed 7/10/98, Notice 4/22/98-published 7/29/98, effective 9/2/98]

EXCERPT FROM THE CODE OF IOWA

135.43 Iowa child death review team established—duties.

1. An Iowa child death review team is established as an independent agency of state government. The Iowa department of public health shall provide staffing and administrative support to the team.

2. The membership of the review team is subject to the provisions of sections 69.16 and 69.16A, relating to political affiliation and gender balance. Review team members who are not designated by another appointing authority shall be appointed by the director of public health in consultation with the director of human services. Membership terms shall be for three years. A membership vacancy shall be filled in the same manner as the original appointment. The review team shall elect a chairperson and other officers as deemed necessary by the review team. The review team shall meet upon the call of the chairperson, upon the request of a state agency or as determined by the review team. The members of the team are eligible for reimbursement of actual and necessary expenses incurred in the performance of their official duties.

The review team shall include the following:

a. The state medical examiner or the state medical examiner's designee.

b. A certified or licensed professional who is knowledgeable concerning sudden infant death syndrome.

c. A pediatrician who is knowledgeable concerning deaths of children.

d. A family practice physician who is knowledgeable concerning deaths of children.

e. One mental health professional who is knowledgeable concerning deaths of children.

f. One social worker who is knowledgeable concerning deaths of children.

g. A certified or licensed professional who is knowledgeable concerning domestic violence.

h. A professional who is knowledgeable concerning substance abuse.

i. A local law enforcement official.

j. A county attorney.

k. An emergency room nurse who is knowledgeable concerning the deaths of children.

l. A perinatal expert.

m. A representative of the health insurance industry.

n. One other appointed at large.

3. The review team shall perform the following duties:

a. Collect, review and analyze child death certificates and child death data, including patient records or other pertinent confidential information concerning the deaths of children age six or younger, and other information as the review team deems appropriate for use in preparing an annual report to the governor and the general assembly concerning the causes and manner of child deaths. The report shall include analysis of factual information obtained through review and recommendations regarding prevention of child deaths.

b. Recommend to the governor and the general assembly interventions to prevent deaths of children based on an analysis of the cause and manner of such deaths.

c. Recommend to the agencies represented on the review team changes which may prevent child deaths.

d. Maintain the confidentiality of any patient records or other confidential information reviewed.

e. Develop protocols for and establish a committee to review child abuse investigations which involve the death of a child.

4. The following individuals shall designate a liaison to assist the review team in fulfilling its responsibilities:
a. The director of public health.
b. The director of human services.
c. The commissioner of public safety.
d. The administrator of the division of vital records of the Iowa department of public health.
e. The attorney general.
f. The director of transportation.
g. The director of the department of education.

5. The review team may establish subcommittees to which the team may delegate some or all of the team's responsibilities under subsection 3.

6. *a.* The Iowa department of public health and the department of human services shall adopt rules providing for disclosure of information which is confidential under chapter 22 or any other provision of state law to the review team for purposes of performing its child death and child abuse review responsibilities.
b. A person in possession or control of medical, investigative or other information pertaining to a child death and child abuse review shall allow the inspection and reproduction of the information by the department upon the request of the department to be used only in the administration and for the duties of the Iowa child death review team. Information and records which are confidential under section 22.7 and chapter 235A, and information or records received from the confidential records remain confidential under this section. A person does not incur legal liability by reason of releasing information to the department as required under and in compliance with this section.

7. Review team members and their agents are immune from any liability, civil or criminal, which might otherwise be incurred or imposed as a result of any act, omission, proceeding, decision or determination undertaken or performed, or recommendation made as a review team member or agent provided that the review team members or agents acted in good faith and without malice in carrying out their official duties in their official capacities. The department shall adopt rules pursuant to chapter 17A to administer this subsection. A complainant bears the burden of proof in establishing malice or lack of good faith in an action brought against review team members involving the performance of their duties and powers under this section.

8. A person who releases or discloses confidential data, records or any other type of information in violation of this section is guilty of a serious misdemeanor.
95 Acts, ch 147, ß2; 97 Acts, ch 159, ß 3, 4

Legislative findings and purpose; 95 Acts, ch 147, ß 1
Subsection 6 amended
NEW subsections 7 and 8

Office of the Iowa State Medical Examiner
Lucas State Office Building, Des Moines, IA 50319-0075

REPORT OF INFANT DEATH SCENE INVESTIGATION BY MEDICAL EXAMINER

Central Office Use Only

____
(Date of Receipt)

____
(DOD Code)

____
(COD Code)

____
(ME Case Number)

Reports Attached (if available):

- ❑ Autopsy
- ❑ DHS Reports
- ❑ EMS
- ❑ ER
- ❑ Medical Records
- ❑ Police
- ❑ Toxicology

Please promptly call the Iowa Department of Public Health for notification of all infant deaths. Call 1-800-383-3826 or fax 515-242-6384.

IDENTIFYING INFORMATION

Decedent (Name registered at Birth): ______________________________
first middle last

Decedent's Home Address: ______________________________
number & street/rural route/box # city, state zip county

Date of Birth: __________ (MM/DD/YY) Date of Death: __________ (MM/DD/YY)

BIOLOGICAL/ADOPTIVE PARENTS

Mother's Name: ______________________________ ________ Date of Birth: __________
first middle last (MM/DD/YY)

Address: ______________________________

Social Security Number: ______________ Telephone: ______________
(area code/number)

Father's Name: ______________________________ Date of Birth: __________
first middle last (MM/DD/YY)

Address: ______________________________

Social Security Number: ______________ Telephone: ______________
(area code/number)

DEATH SCENE

Infant put down to sleep? (Y/N)________ When?________ Where? ______________

by Whom? ______________________________

Infant's position (on back, side, stomach, other): ______________________________

What was infant's usual sleeping position? ______________________________

Did the baby do anything unusual in the last 24 hours? (Y/N)________ Describe: ______________

____

Infant found: where in home (e.g., crib, etc.)? ______________________________

by whom? ______________________________

condition (stiff, mottled, etc.)? ______________________________

Resuscitation? (Y/N)__________ by whom? ____________________

time started:__________ describe methods used: ____________________

CAREGIVER(S) AT TIME OF DISCOVERY

Name:____________________ Age: ________ SS#: ____________
first middle last

Address/phone: ____________________
(Complete if other than parents)

Type of Caregiver: ____________________ How long a caregiver to this infant? ____________
(Professional, neighbor, etc.)

List all other persons present in residence from time child put down to when discovered unresponsive:
(include full name, date of birth, address and social security number)

____

____

____

____

Is the caregiver aware of any prior infant deaths? (Y/N)__________ If yes, give details: ____________

____

STATEMENT FROM OFFICIAL PRE-HOSPITAL RESPONDER(S)

Name(s): ____________________ Telephone: ____________

Agency(s)/Address: ____________________

When did they arrive? ____________________

Condition of infant? Vital signs (pulse, respiration)?: ____________________

Observable injuries? ____________________

____

Postmortem changes (rigor, etc.)? ____________________

Resuscitation attempted? (Y/N) __________ If yes, describe methods (e.g. CPR, IV, ET, I&O, suction): ____________

____

____

Had infant been moved to location other than where first found? (Y/N)__________

By whom? ____________________

From where to where? ____________________

Why was infant moved? ____________________

____

Describe precise position of infant as described by caretaker (i.e. face down, vomitus, blood, etc.):

____

____

____

Describe precise position of infant as described by first responder if different from caretaker:

____

____

____

Describe objects in sleeping environment (e.g. bedding materials: mattress, blankets, pillows, bumper pads, etc.)
Detail softness, compressibility, include condition of crib:(? loose slats, gap between mattress and frame, and was crib clean?):

____

____

____

Any objects close to infant's face? (Y/N)__________ If yes, describe: ______________________

Could infant's face press into materials on which he/she was laid? (Y/N) __________ Explain:__________

____

SURROUNDINGS AT PLACE OF DEATH

Type of home (e.g., mobile home, single family dwelling, condo, apartment, other-describe: __________

____

Condition: ______________________ Room temperature when infant found: __________

Was the house clean and orderly? (Y/N)__________ If no, explain: ______________________

____

Heating system: Type:__________ Describe: ______________________

Cooling system: Type:__________ Describe: ______________________

Any evidence of tobacco/smoke?__________ Other odors? ______________________

Any evidence of alcohol or any other drugs in home? ______________________

Recent painting or fumigation? (Y/N)__________ Explain: ______________________

Other obvious health hazards? ______________________

____

RECOMMENDATIONS FOR COLLECTION OF MATERIALS

What materials were collected?
- ❑ Bottle
- ❑ Formula in refrigerator
- ❑ Bedding
- ❑ Other ____________________

What photo or video documentation was taken? ____________________

INFANT'S HEALTH HISTORY

Place of birth - address: ____________________

Birth weight:__________ Length:__________ Birth Order:__________

Neonatal complications? ____________________

Use of home monitor? (Y/N)__________ In use at time of death? (Y/N)__________

Last meal: What did last meal consist of? ____________________

Amount:__________ When started:__________ When finished:__________

Dietary habits: (Breast fed/Bottle fed? Formula? Frequency? Amount taken? How prepared? Who prepared it?):

____

____

Recent changes in feeding habits? (Y/N)__________ Explain: ____________________

Primary care physician's name ____________________
first middle last

Address: ____________________
City State Telephone

When was decedent last seen by a physician?__________ Describe circumstances: ____________________

____

Development (e.g., appropriate milestones reached for age. Ask about doctor's opinion): ____________________

____

Growth (general appearance, size, weight): ____________________

Medications (include home remedies and over-the-counter): ____________________

____

List immunizations and dates: ____________________

____

____

Most recent illness (describe): ____________________

MOTHER'S HEALTH HISTORY

Any illness or medical complications during pregnancy? (Y/N)__________ If yes, describe: __________

____

Previous significant illnesses? __________

____

Dietary habits? __________

Family history of previous SIDS? (Y/N)__________ Explain: __________

Have you ever been hit or kicked or pushed down within the last two years? (Y/N)__________

Explain: __________

Risk factors? (e.g., smoking, drugs, alcohol use, other) __________

Use of prescription or other medications? __________

Any other past history of substance abuse? (Y/N)__________ If yes, describe: __________

____

ALL PERSONS LIVING WITH DECEDENT

Full Name	Date of Birth	Relationship to Decedent	Soc. Sec. #	Employer

Marital/domestic status of those living in decedent's home. (e.g., married, single): __________

Approximate annual household income? __________

Language(s) spoken at home __________

Does the family have a social worker? (Y/N)__________ If yes, identify: __________

Violence in the home (describe)? __________

____

Any previous referrals to social services? (Y/N)__________ If yes, specify: __________

____

I hereby certify that after receiving notice of the death described herein, I took charge of the body and made inquiries regarding the cause of death in accordance with Chapter 331 of the General Statutes of Iowa-1983, and the information contained herein regarding such death is true and correct to the best of my knowledge and belief.

____
(Signature of Medical Examiner)

____
(Date Signed) (County of Appointment) (M.E. Number)

Further information about the Iowa Child Death Review Team may be obtained by writing or calling. The mailing address and telephone number are as follows:

Child Death Review Team
Lucas State Office Building - 5th Floor
Des Moines, Iowa 50319-0075
Telephone - 515/281-3108
Fax - 515/242-6384
Email - spettit@idph.state.ia.us

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Iowa Department of Public Health
Lucas State Office Building
321 East 12th Street
Des Moines, Iowa 50319-0075