REPORT TO THE GOVERNOR
AND GENERAL ASSEMBLY

IOWA CHILD DEATH REVIEW TEAM

December 2001

Administrative Support Provided by:
IOWA DEPARTMENT OF PUBLIC HEALTH

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Foreword

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We began the task of reviewing the deaths of all children in Iowa with sampling and then reviewing 33% of the deaths of children ages 7 through 17. Following the legislative direction of expanding the scope of our reviews to include deaths of older children, we logged 472 deaths of young Iowans or children dying in Iowa, in 2000. Unfortunately, the trend of declining deaths starting between 1998 and 1999, ceased with a 10% increase in deaths of children ages birth through age 6 for the year 2000. Deaths for this age group jumped, going from 291 deaths in 1999 to 322 in 2000. With older children now included, we saw in our sample of 150 deaths, a number of motor vehicle deaths as well as alcohol-related deaths. Significant as well were the 18 suicides in children ages 11 through 17 years.

The Iowa Department of Public Health supported the Iowa Child Death Review Team this year with staff assistance that enabled us to conduct the sampling of older children's deaths. Without this support in the future, we anticipate that only younger children's deaths may be reviewed, or at best, we may be able to continue to sample the older children's deaths. The Child Death Review Team is extremely grateful for the Governor's support and the Iowa Department of Public Health's assistance in increasing the team's operating budget for the current fiscal year. In order for the team to review all child death cases in upcoming years, this same level of funding must be maintained. The team trusts that the Iowa General Assembly will also support an adequate appropriation for the team's work.

Child Death Review Team members made numerous presentations to professional groups increasing the awareness of SIDS risk factors. We also provided education regarding the role of the team and the use of the recently published standard death-scene investigation protocol by the State Medical Examiner's Office. We hope that other recommendations contained in this and previous annual reports will help to reduce the number of deaths of our most important resource: our children.

Executive Summary

The Iowa Child Death Review Team (CDRT) met 9 times during 2001 to review child deaths. For children ages birth through 6 years, all homicides, accidents, SIDS, undetermined and numerous natural deaths were reviewed by the full team or a subcommittee of the team.

In 2000, the Governor and Iowa General Assembly expanded the CDRT's purview to include deaths of children ages 7 – 17 years in addition to children 6 years and younger. Since this expansion did not occur until well into 2000, the team decided it would review only a sample of the deaths occurring in the older children during that year. Of the 150 deaths of youth over 6 years of age, 49 (33%) were evaluated. The team reviewed suicide deaths for the first time. To assist in assessing risk factors that may have led to these deaths, a child psychiatrist was added to the CDRT as the mental health representative.

Along with reviewing 371 of the 472 child deaths, the team took an active role in helping to prevent future child deaths and to make Iowa a safer place for children. They participated in legislative hearings, gave educational presentations and published related articles in professional journals.

Recommendations to the Governor and Iowa General Assembly are detailed in the beginning of the report with documentation in the statistics following. It is hoped that our elected officials will carefully review these suggestions and then partner with the members of the Iowa Child Death Review Team by taking action on these recommendations so that Iowa's children will be safer and will have the opportunity to grow and thrive.

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.

2001 IOWA CHILD DEATH REVIEW TEAM REPORT TO THE GOVERNOR AND IOWA GENERAL ASSEMBLY

In 1995, a new state law established the Iowa Child Death Review Team (CDRT). This law describes the team membership and the specific responsibilities of the CDRT. Additional legislation was passed in 1998 that protects team representatives from liability while performing their duties to the team and protects entities that supply information to the CDRT for review.

The Child Death Review Team is composed of 14 members and 7 state government liaisons. Each member represents a different profession or medical specialty, but all of the organizations represented have a documented commitment to helping children survive and thrive. There is a member representing each of the following: perinatology, pediatrics, law enforcement, social work, mental health, substance abuse, domestic violence, family practice, state medical examiner, county attorneys, SIDS, insurance industry, emergency room nurse, and a member-at-large.

Liaisons from the following state agencies also participate in review of child death cases: human services, public health, transportation, attorney general's office, education, vital records and public safety. These representatives are selected by their agency director with consideration of their expertise in child behavior, injury and death and their commitment to team attendance and inter-departmental cooperation.

The Iowa Department of Public Health provides coordination and administrative support for the Child Death Review Team. The teams' responsibilities include:

- Collection, review and analyses of child death certificates, data and records concerning the deaths of children ages birth through 17 years, and preparation of an annual report summarizing the team's findings.
- Formulation of recommendations to the governor and general assembly about interventions that could prevent future child deaths.
- Formulation of recommendations to state agencies represented on the CDRT as to how they may improve services to children to prevent future child deaths.
- Maintenance of confidentiality of all records that the team reviews.
- Development of protocols and a child abuse-related death committee.

The law also specifies the length of team appointment and attendance requirements for the CDRT members.

It should be noted that the 1995 legislation mandated reviews of child deaths through age 6 years. In 2000, that age was expanded to include child deaths through age 17 years.

Since 1995, the Child Death Review Team has reviewed more than 2000 cases of child death. This document is the sixth CDRT annual report regarding child death in the state of Iowa and ways that future child deaths might be reduced or prevented.

The law establishing the CDRT (*Code of Iowa 135.43*) may be found in appendix A. The rules governing the team's operation may be found in the *Iowa Administrative Code 641-90(135)*, also in appendix A.

RECOMMENDATIONS FOR PREVENTION OF FUTURE DEATHS

The Child Death Review Team has reviewed cases of child deaths for six years. The recommendations made in this report are intended to help prevent future deaths. These recommendations are not case-specific, but are intended to deal with a broad range of issues. After a list of the specific recommendations, there is a brief discussion as to why each recommendation was made. **Special attention should be given to any recommendation that has been given in previous annual reports and is stated again this year.**

RECOMMENDATIONS TO THE GOVERNOR AND THE IOWA GENERAL ASSEMBLY

RECOMMENDATIONS REQUIRING LEGISLATIVE ACTION:

Recommendation 1**:** The CDRT recommends continued expansion of the Community Empowerment initiative. The CDRT especially advocates implementation of Community Empowerment programs 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 care practices relating to infants and young children.

Recommendation 2**:** The CDRT recommends raising the fine to $100 for driving with an improperly restrained child under six years of age in a motor vehicle.

Recommendation 3**:** The CDRT recommends that the performance of an autopsy including toxicology studies be required for every death of a child through age 6 with the exception of children who are known to have died of a disease process while attended by a physician. In addition, the team recommends full body x-rays of any child who dies before their third birthday.

Recommendation 4**:** The CDRT recommends reimbursement for actual expenses incurred for the performance of an autopsy, x-rays and toxicology tests on an infant dying from Sudden Infant Death Syndrome be made to any county in which a SIDS death occurs. The current law allots $400 per case. The limit for this reimbursement should be $1700.

In addition, the CDRT recommends payment of up to a $600 reimbursement for transportation of the body to the autopsy site.

Recommendation 5**:** Immediate drug screens should be done on caretakers and people having access to the child just prior to the death. All drivers involved in a fatal motor vehicle accident should be tested for alcohol and drugs at the time of the crash.

Recommendation 6**:** Funding appropriated for continued operation of the Iowa Child Death Review Team should be maintained at the current $68,265 level, so that the actual expenses incurred in operation of team activities may be covered in full by the allotted funds.

Recommendation 7: The penalty for child endangerment that results in the death of a child should be increased. Section 726.6 of the Iowa Code should be amended to add a NEW subsection 726.6(2), as follows: "A person who commits child endangerment resulting in the death of a child or minor is guilty of a class "B" felony. However, notwithstanding section 902.9, subsection 2, the maximum sentence for a person convicted under this section shall be a period of confinement of not more than fifty years."

Section 902.12 of the Iowa Code should be amended to add a NEW subsection 902.12(6), as follows: "Child endangerment resulting in the death of a child or minor in violation of section 726.6(2)."

Recommendation 8: The CDRT recommends that all private, in-ground and above ground swimming pools sold in Iowa be required by law to have a pool alarm installed by the seller or the purchaser.

OTHER RECOMMENDATIONS:

Recommendation 9**:** 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.

Recommendation 10: The CDRT recommends establishment of a statewide system of local or regional child death review teams to review deaths of all children through age 17 occurring in their area. They would share their information with the state team. These teams should be permitted the same statutory authority given to the state CDRT to gather and review information related to child deaths provided they operate under strict confidentiality guidelines.

***Recommendation 11*:** The CDRT 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 three 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.

DISCUSSION OF RECOMMENDATIONS:

The following text offers background information that supports and explains why the CDRT has made each recommendation to the governor and legislature.

Recommendation 1: The majority of child deaths resulting from accidents and many resulting from Sudden Infant Death Syndrome (SIDS) could be prevented. Lack of adequate knowledge about child rearing and health, sometimes coupled with lack of parental supervision, plays a huge role in these types of deaths. For example, parents may be unaware of the dangers of even a small amount of bathtub water and the danger it poses to a toddler. Rural families often do not think about the dangers offered by farm ponds, large machinery or building materials. Many parents are unaware that prone sleep position or smoking during pregnancy or afterward contributes to SIDS. **Therefore,** programs such as the Empowerment initiative are of tremendous value in educating new parents and preparing them to provide appropriate and adequate care for their children.

Recommendation 2: All too frequently children are not properly restrained in a moving automobile, SUV or truck. In a motor vehicle collision, an unrestrained or inadequately restrained child can be ejected from the vehicle or thrown around in the vehicle. Fatal head injuries and internal injuries often result in these instances.

Therefore, anything that may help deter drivers from failing to follow the law that requires children under age 6 to be restrained in a moving vehicle, should be done. A <u>significant fine of $100</u> would help to obtain compliance.

Recommendation 3: An immediate autopsy of a young child who dies helps to accurately pinpoint the precise cause and manner of death. Accurately classifying manner and cause assures that any wrongdoing in the death may be adequately and quickly investigated. It also helps to determine preventable factors that led to the death.

Recommendation 4: 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 **exceeds $1500** 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.

Increased reimbursement would ease the burden of counties adhering to guidelines for autopsies on infants. It would also encourage transporting bodies to the state medical examiner for autopsy rather than sending them out-of-state just because that facility is geographically closer.

Recommendation 5: Alcohol and drugs may play a large part in child neglect, inappropriate child-care, child abuse or in motor vehicle mishaps. It is impossible to assess the involvement of chemical substances in the death of a child if testing for these substances is not done <u>immediately</u> at the death scene on all care providers present when the child dies. Deaths may be inaccurately classified as to cause; perpetrators may go unidentified or unpunished; the extent of the involvement of chemical substances in child deaths may be under-reported and so not addressed by public health programs or legislative action. A law requiring this testing would assure that law enforcement in all parts of the state adhere to this recommendation.

Recommendation 6: In 1995 when the Child Death Review Team was established by the legislature and governor, an appropriation of $20,000 was set aside for the team's operation. This funding was to cover team members' travel, report requests, copying of records, development and printing of an annual report, staff support and any other related expenses necessary for the optimal functioning of the CDRT. In 1998, the legislature and governor established the Domestic Violence Review Team. The CDRT had the same tasks as when it was originally founded, but $5,000 of the original $20,000 appropriation was set aside for the new Domestic Violence Review Team.

In 2000, the purview of the CDRT expanded from children birth through age 6 to birth through age 17. The appropriation still remained at $15,000. This funding did not cover much more than team travel, the annual report development and printing, case ordering and some printing. The Governor, with the assistance of the Iowa Department of Public Health established funding in the amount of $68,265 for the team's operation in FY 2002. The CDRT must continue to have at least this amount of funding in order to complete its work.

Since the 14 professionals on the team donate an average of 12 hours per month to perform the work of the CDRT, it appears that continuing funding of the team at $68,265 per year through an adequate budget appropriation is a sound investment for Iowa's future.

Recommendation 7: When children die from non-accidental, intentionally inflicted injuries, a perpetrator may presently be charged with either child endangerment resulting in serious injury, a class "C" felony punishable by 10 years in prison, or with murder in the first degree, a class "A" felony punishable by life in prison without parole. In those instances where the available evidence does not support a first degree murder charge ("extreme indifference to human life"), the charge of child endangerment resulting in serious injury is seen as an insufficiently serious charge for those acts of child endangerment which result in a child's death.

Recommendation 8: The CDRT has reviewed numerous deaths of children who drowned in a residential swimming pool. All of these deaths were preventable, had someone known that a child had entered the water. Despite Consumer Product Safety Commission recommendations to the public about putting a fence with a locked gate around any home pool, owners continue to leave pools open and accessible to curious children. A new pool alarm has been developed that can be installed at the water line, inside of the pool. If anyone goes into the pool when the alarm is set, a warning signal sounds to alert the owner and others residing in the area that someone has entered the water.

The cost of this type of alarm is approximately $250, a cost that is negligible in consideration of what a pool costs.

Recommendation 9: Medical research long ago identified 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 unborn child. Exposure of an infant to secondhand smoke either at home or at a child care provider's residence may be noted on an Infant Death Scene Investigation, if one is done, but this information has usually been

sketchy. We truly do not have an accurate idea of how many infant deaths in Iowa may be related to smoking. It is suspected that the number is much greater than birth certificates and death investigations indicate.

If cotinine testing were done on all infants who die in Iowa, a true grasp of the extent of tobacco exposure in utero and after birth could be assessed. Then, the need for better smoking-related interventions would be documented in Iowa's population.

Recommendation 10: The CDRT conducts retrospective reviews of child deaths so that all records related to the child, such as autopsies and law enforcement investigations, are 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 obtain 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 are delayed.

Several states, notably North Carolina, Colorado and Missouri have developed statewide systems of county multi-disciplinary child death review teams. These teams meet immediately following the death of a child to pool their information, 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.

Only five Iowa counties (Polk, Woodbury, Dubuque, Pottawattamie and Scott) currently have local review teams. Most of these teams review only infant deaths or child abuse-related deaths. Dubuque County is the only county that includes older children among its cases. With the expansion of the state's CDRT to include children through age 17 years, it would be helpful to have all local teams include children of the same ages. As with the state team, the focus of these five local teams is to use what is learned from reviews to prevent future deaths.

Establishing a statewide system of local or regional teams would assure earlier, more thorough and targeted interventions on a community level when any child dies.

Recommendation 11: 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.
Requiring more efficient completion of reports to the state medical examiner's office would assist the team in its operation and assure complete reporting of all deaths to that office.

RECOMMENDATIONS TO STATE AGENCIES

Recommendation 1: 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 and/or neglect. (It is recognized that the Iowa Department of Human Services has made much 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.)

Recommendation 2: to the Commission of Uniform State Laws. The CDRT recommends that the Commission on Uniform State Laws propose legislation in Iowa 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. This 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 that 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." A meeting between Iowa's CDRT and representatives from other Child Death Review Teams was held in Des Moines in April 2000. One of the main objectives of that conference was to discuss better sharing of information among states. All state team representatives agreed that they also have problems collecting information from other states, and they would support an interstate agreement that would expedite and ease the process.

***Recommendation 3*: to the Iowa Department of Human Services.** The CDRT recommends that all foster care parents and all registered in-home child-care providers be required to learn and be certified in child and infant CPR and be required to be re-certified in this procedure annually. In addition, foster parents and in-home child-care 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 and safety before they are accepted into the foster care program or before they can be registered to do in-home child-care.

***Recommendation 4*: 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 of any 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.

***Recommendation 5*: to the Iowa Department of Public Health.** The CDRT recommends enhanced statewide educational efforts 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 before and after birth.

***Recommendation 6*: to all state agencies and their local units or contractors who conduct activities in the homes of their clients/ customers.** The CDRT recommends that the <u>state agencies require</u> 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 and carbon monoxide alarms. They should also evaluate the presence of other safety hazards and recommend to residents when repairs, changes or replacements are needed.

***Recommendation 7:* to the Iowa Department of Public Safety and the Iowa Law Enforcement Academy.** The CDRT recommends that all law enforcement agencies follow the Child 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 the curriculum of the Iowa Law Enforcement Academy include instruction regarding use of this protocol and report form.

***Recommendation 8:* to the Iowa Law Enforcement Academy.** The Child Death Review Team recommends that the Iowa Law Enforcement Academy curriculum emphasize the importance of death scene photographs and sketches along with use of the Death Scene Investigation Protocol.

***Recommendation 9:* to the Iowa Department of Human Services.** The Child Death Review Team recommends long term close monitoring of children after they have been returned to their parental home or after a parent who has been incarcerated returns to the home. Special attention should be given to substance abuse by the parent(s) and unsafe surroundings in the child's home. Multidisciplinary team staffings and contacts with the parent's probation officer are suggested for these types of cases.

***Recommendation 10:* to the Iowa Department of Human Services.** The Child Death Review Team recommends removal of very young children (less than 4 years old) from unsafe family situations while the parents work to improve the home environment. Close follow up with the family to monitor their progress should be made before a child is returned to the home, and frequent and thorough visits to the home should be made for one year after the child is back with the family.

In addition, any caseworker entering a home for any reason should perform a home safety check that includes, at minimum, the items listed on the checklist in Appendix D. The results should be reviewed with the parent(s), and the safety check should be repeated at a later date to see if improvements have been made.

***Recommendation 11:* to the Iowa Department of Public Health.** The Child Death Review Team recommends increased education for parents regarding hazards of delayed medical care, second hand smoke exposure, inappropriate dosing of medications and drug interactions. It further recommends enlisting the cooperation of hospitals to include this education for new parents both verbally and through printed information in their discharge-packets.

Child Death Review Team Accomplishments

During the 2001 calendar year, the members of the Child Death Review Team took a very serious and proactive approach toward helping to save Iowa's children from early deaths. These accomplishments focused primarily on education, meetings and awareness building activities around the state.

Specifically, in addition to reviewing 472 cases of child death, the members of the CDRT:

- Met with members of the Iowa Senate to discuss ways to improve the mandatory reporting of child abuse cases in the state and better training of mandatory reporters.
- Advanced awareness among health professionals and the public by giving presentations about child abuse.
- Participated as members of local child death review teams in their county of residence.
- Worked with the state medical examiner to widely disseminate the newly revised Child Death Scene Investigation Form to law enforcement personnel and county medical examiners.
- Worked with the Iowa Department of Public Health and the Iowa SIDS Alliance on their statewide SIDS conference for professionals that was held on October 12, 2001. Several CDRT members were presenters at that conference.
- Helped plan and participated in the second annual meeting of Child Fatality Review teams from Kansas, Illinois, Nebraska, Wisconsin, Minnesota, Missouri, Indiana and Iowa that was held in Illinois in May, 2001.
- Worked with the Polk County African American community to explore and address the high rate of black infant mortality in Iowa.
- Published an article regarding positioning of infants in newborn nurseries in Iowa hospitals in *Pediatrics.*
- Revised the Child Death Review Team data collection form to include variables related to deaths of older children.

Iowa Deaths - Year 2000
Children Ages Birth through 17 Years
By County of Residence

County	Number	County	Number	County	Number
Adair	1	Floyd	0	Monona	1
Adams	1	Franklin	1	Monroe	0
Allamakee	1	Fremont	1	Montgomery	1
Appanoose	0	Greene	2	Muscatine	3
Audubon	2	Grundy	2	O'Brien	3
Benton	4	Guthrie	2	Osceola	1
Black Hawk	17	Hamilton	5	Page	1
Boone	7	Hancock	2	Palo Alto	1
Bremer	2	Hardin	3	Plymouth	11
Buchanan	1	Harrison	3	Pocahontas	1
Buena Vista	1	Henry	5	Polk	70
Butler	4	Howard	2	Pottawattamie	15
Calhoun	0	Humboldt	0	Poweshiek	0
Carroll	1	Ida	1	Ringgold	3
Cass	3	Iowa	3	Sac	2
Cedar	0	Jackson	6	Scott	35
Cerro Gordo	8	Jasper	6	Shelby	2
Cherokee	1	Jefferson	1	Sioux	6
Chickasaw	1	Johnson	10	Story	7
Clarke	1	Jones	0	Tama	3
Clay	2	Keokuk	2	Taylor	0
Clayton	4	Kossuth	3	Union	4
Clinton	6	Lee	8	VanBuren	2
Crawford	2	Linn	28	Wapello	3
Dallas	7	Louisa	3	Warren	3
Davis	1	Lucas	3	Washington	0
Decatur	1	Lyon	2	Wayne	3
Delaware	4	Madison	3	Webster	4
Des Moines	6	Mahaska	12	Winnebago	3
Dickinson	3	Marion	2	Winneshiek	4
Dubuque	18	Marshall	4	Woodbury	16
Emmet	5	Mills	1	Worth	2
Fayette	2	Mitchell	1	Wright	2

Number of Out of State Children
Ages Birth through 17 Years
Dying in Iowa in 2000

State	Number	State	Number
Nebraska	5	Missouri	2
Minnesota	2	Wisconsin	1
Mexico	1	South Dakota	1
New York	1	Indiana	1
Illinois	1	California	1

Ages of Children at Death

Of the 472 children who died in 2000, the youngest was minutes old, and the oldest child was nearly 18. The three age classifications used in this report are birth through 28 days (neonatal), 29 days through 364 days (post-neonatal) and 1 through 17 years (child).

Child deaths increased significantly for children 15 years of age and older, primarily due to motor vehicle accidents involving teenage drivers. Several of these accidents involved alcohol or drugs, excessive speed or other unsafe conditions.

Year 2000 Deaths by Age Group

Age Group	Total	Percent
Neonatal	164	34.7
Post-neonatal	86	18.2
01 Month	16	
02 Months	12	
03 Months	17	
04 Months	14	
05 Months	6	
06 Months	6	
07 Months	2	
08 Months	4	
09 Months	3	
10 Months	5	
11 Months	1	
Child	222	47.0
01 Year	15	
02 Years	17	
03 Years	10	
04 Years	9	
05 Years	13	
06 Years	8	
07 Years	6	
08 Years	7	
09 Years	4	
10 Years	8	
11 Years	8	
12 Years	6	
13 Years	9	
14 Years	7	
15 Years	24	
16 Years	32	
17 Years	39	

Gender

In any given time period, more male than female children are born and more male than female children die. In 2000, 58.9% of the child deaths were males and 41.1% were in females.

Deaths by Gender – Year 2000

Age Group	Gender	Number	% of All Deaths
Neonatal	Male	94	19.9
	Female	70	14.8
Post-neonatal	Male	50	10.6
	Female	36	7.6
Child	Male	134	28.4
	Female	88	18.6
Total	Male	278	58.9%
	Female	194	41.1%

Age Groups by Race/Ethnicity and Gender

Race/ethnicity and gender are shown in the following tables for calendar year 2000 child deaths. The race/ethnicity attributed to the child is that listed on the birth certificate for the mother.

The majority of deaths occurred among whites, followed by blacks. Because Iowa's population is composed primarily of Caucasian individuals, these results are to be expected. However, prevention messages and intervention programs must be careful to target all cultural and ethnic groups across the state in the manner most accessible and useful to each individual group.

Total Deaths by Race/Ethnicity and Gender

Race/ Ethnicity	Male	Female	Total	% of Total
White	238	165	403	85.4
Native American	4	1	5	1.1
Hispanic	12	10	22	4.7
Black	19	14	33	7.0
Asian	5	4	9	1.9
Total	**278**	**194**	**472**	**100%**

Neonatal Deaths by Race/Ethnicity

Race/ Ethnicity	Male	Female	Total	% of Total
White	76	57	133	81.1
Native American	2	1	3	1.8
Hispanic	7	5	12	7.3
Black	7	5	12	7.3
Asian	2	2	4	2.4
Total	**94**	**70**	**164**	**100%**

Post-Neonatal Deaths by Race/Ethnicity and Gender

Race/ Ethnicity	Male	Female	Total	% of Total
White	43	29	72	83.7
Native American			0	0.0
Hispanic	2	2	4	4.7
Black	4	4	8	9.3
Asian	1	1	2	2.3
Total	**50**	**36**	**86**	**100%**

Child Deaths by Race/Ethnicity and Gender

Race/ Ethnicity	Male	Female	Total	% of Total
White	119	79	198	89.2
Native American	2	0	2	0.9
Hispanic	3	3	6	2.7
Black	8	5	13	5.9
Asian	2	1	3	1.3
Total	**134**	**88**	**222**	**100%**

Manner of Death

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

- **Natural** means the death was the result of some natural process, such as disease, prematurity/immaturity or congenital defect. Most deaths by this manner are considered by the CDRT to be non-preventable. However, many deaths from prematurity or congenital defects might be prevented through better counseling during preconception and pregnancy, through earlier or more consistent prenatal care and through smoking cessation.

- **Accidental** means the death resulted from some unintentional act. This manner of death is the most effectively reducible through education of all care providers of children to provide a safe environment with adequate supervision.

- **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.

- **Suicide** means that evidence exits that the child intentionally caused his or her own death.

Prior to 2001, the team only dealt with deaths from natural, accidental, undetermined and homicide manners. Unfortunately, 18 youth died from suicide in the year 2000.

In addition to these 5 manners of death, when the manner and cause have not yet been determined and the investigation is still incomplete, "pending" is recorded as the manner of death. When the final determination has been made, the medical examiner amends the death certificate to accurately indicate the manner and cause of death.

For 2000, there were no children for whom an amended death certificate was not submitted to Iowa's Department of Vital Records because of diligent efforts by their staff to obtain the updated information.

Manner of Death For All Child Deaths 2000

Manner	Number	% of Deaths
Natural	286	60.6
Accident	102	21.6
Homicide	20	4.2
Suicide	18	3.8
Undetermined	46	9.7
Total	**472**	**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 286 deaths in this group were due to 5causes: 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 2 causes of natural deaths were prematurity and congenital defects. The 286 natural deaths comprised 60.6 percent of all 2000 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.

One death was from a natural manner, but after careful review, the CDRT still could not attribute the death to a specific cause. Therefore, that death is listed as undetermined cause of death under the natural manner deaths.

Causes of Natural Deaths
All Children through 17 Years of Age

Cause	Number	% of Natural	% of All Deaths
Prematurity	111	38.8	23.5
Congenital Defects	91	31.8	19.3
Cancer	36	12.6	7.6
Infection	27	9.4	5.7
Birth Complications	13	4.5	2.8
Asthma	4	1.4	0.8
Diabetes	2	0.7	0.4
Dehydration	1	0.4	0.2
Undetermined	1	0.4	0.2
Total	**286**	**100%**	**60.6%**

Age Groups by Causes
Of Natural Deaths

Cause	Neo-natal	Post Neo-natal	Child	Total
Prematurity	102	7	2	**111**
Congenital Defects	41	19	31	**91**
Cancer		3	33	**36**
Infection	4	8	15	**27**
Birth Complications	12		1	**13**
Asthma			4	**4**
Diabetes			2	**2**
Dehydration		1		**1**
Undetermined		1		**1**
Total	**159**	**38**	**89**	**286**
% of Natural Deaths	**55.6**	**13.3**	**31.1**	**100%**

Accidental

In 2000, 101 children died from accidental trauma. Accidents comprised 21.4 percent of all child deaths occurring that year. The major cause was from motor vehicle collisions (57.4% 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 of all ages.

The CDRT agrees that better adult supervision could have prevented many of these deaths. Parents and other caregivers need to know where young children are at all times. Adults should remove all dangerous objects from the child's environment and make children use protective gear when they are taking part in potentially dangerous activities. Those adults who care for young children should adhere to safe bedding guidelines set forth by the American Academy of Pediatrics and the Consumer Product Safety Commission.

They should watch for drug and alcohol use among teens that drive and stress bike, motorcycle and automobile safety, including proper use of seat belts and child restraint systems. All parents and other caregivers should make sure fire alarms are in operational order at all times.

Fences with locked gates and pool alarms should be used to protect children from wandering into yards with unattended swimming pools. Firearms should be locked away from children and ammunition kept in a separate, locked area.

Children less than 12 should not be allowed to operate any motor vehicle including snowmobiles, all terrain vehicles or go-carts.

Causes of Accidental Deaths All Children through 17 Years of Age

Cause	Number	% Acc. Deaths	% of All Deaths
Aircraft Crash	1	1.0	0.2
ATV Accident	2	2.0	0.4
Anesthesia Reaction	1	1.0	0.2
Asphyxiation	1	1.0	0.2
Bike-Auto Accident	1	1.0	0.2
Car-Train Accident	1	1.0	0.2
Carbon Monoxide	2	2.0	0.4
Drowning	6	5.9	1.3
Drowning-Farm	2	2.0	0.4
Drug Overdose	2	2.0	0.4
Electro-cution	1	1.0	0.2
Fall	1	1.0	0.2
Falling Object	2	2.0	0.4
House-fire	13	12.9	2.8
Hyper-thermia	2	2.0	0.4
Motor Vehicle Acc.	59	57.8	12.5
Motorcycle Accident	1	1.0	0.2
Positional Asphyxia	1	1.0	0.2
Roller-blading Acc.	1	1.0	0.2
Snowmobile Accident	1	1.0	0.2
Strangulation	1	1.0	0.2
Total	**102**	**100%**	**21.6%**

Homicide

Homicides accounted for 20 deaths in 2000. The perpetrator's relationship to the victim varied. In 5 cases, the father was the perpetrator. The mother was responsible in 3 deaths. The child-care provider was responsible in 3 instances, and a friend of the family was the perpetrator in 4 cases. The mother's paramour was guilty in 2 cases. The remaining homicide cases were not part of the sample reviewed of older child deaths occurring in 2000 so the perpetrator was not identified by the CDRT.

Homicide deaths are another area where prevention is possible. When a young child is the victim, this type of death often indicates anger and frustration on the part of the caregiver. Parents and caregivers need easily accessible outlets, i.e. respite care or someone to call, when stresses of child-care escalate. Improved dissemination of information to all new parents about resources could assist in preventing future child homicide deaths. A system of home visits soon after an infant's birth to families that are at high risk for abusing children is needed in every community. Early intervention could save lives.

Older children must not have easy access to firearms. All children should be closely supervised to make sure their social contacts are appropriate and interactions take place under safe circumstances.

Parents must be conscientious and discriminating about the adults they bring into close and unsupervised contact with their children, no matter what the role of the outsider is to be in the household.

Communities must work together to stem the use of drugs and alcohol, and eliminate the existence of domestic violence among families and gang activities outside of the home.

Causes of Homicide Deaths
All Children through 17 Years of Age

Cause	Number	% of Homicides	% of All Deaths
Shaken Baby	8	40.0	1.7
Drowning	4	20.0	.8
Motor Vehicle Coll.	3	15.0	0.6
Gunshot Wound	2	10.0	0.4
Sexual Abuse	1	5.0	0.2
Hyperthermia	1	5.0	0.2
House-fire	1	5.0	0.2
Total	**20**	**100%**	**4.2%**

Age Groups by
Causes of Homicide Deaths

Cause	Neo-Natal	Post Neo-Natal	Child	Total
Shaken Baby		4	4	8
Drowning			4	4
Motor Vehicle			3	3
Gunshot Wound			2	2
Sexual Abuse			1	1
Hyper-thermia		1		1
House-fire			1	1
Total	**0**	**5**	**15**	**20**
% of Homicides	**0.0**	**25.0**	**75.0**	**100%**

Undetermined

Undetermined manner of deaths includes any death that cannot be classified as natural, accident, suicide or homicide. Most of the deaths included in this manner are ruled Sudden Infant Death Syndrome (SIDS). Sudden Infant Death Syndrome is specified as the cause of death when all other causes have been eliminated based on a thorough autopsy, death scene investigation and clinical history.

Although SIDS deaths are recorded on the death certificate as natural, the CDRT considers all SIDS deaths to be undetermined manner of death based on the technical definition of SIDS.

The team determined that there were 46 child deaths for which autopsies failed to pinpoint a specific cause of death. The cause of death in the majority (38) of these deaths was found to be SIDS. One child drowned, but the team could not determine the manner of death. The remaining 7 deaths were due to a variety of other causes, none of which could be clearly identified.

Causes of Undetermined Deaths
All Children through 17 Years of Age

Cause	Number	% of Undetermined	% of All deaths
SIDS	38	82.6	8.1
Undeter-mined	7	15.2	1.5
Drowning	1	2.2	0.2
Total	**46**	**100%**	**9.8%**

SIDS Deaths

Most SIDS deaths occur in infants 2 to 4 months of age at the time of death. SIDS is more prevalent in males than females. In the year 2000, nearly 58% of the SIDS deaths occurred in children aged 2 to 4 months, and about 74% involved males.

Ages and Gender of SIDS Deaths

Age	Male	Female	Total
<01 month	3	1	4
01 months	6	1	7
02 months	3		3
03 months	8	3	11
04 months	5	3	8
05 months	2		2
06 months	1		1
07 months			0
08 months		2	2
Total	**28**	**10**	**38**

Race/Ethnicity of Children Who Died of SIDS

Race	Count	Percent
White	33	86.9
Hispanic	1	2.6
Black	3	7.9
Native American	0	0.0
Asian	1	2.6
Total	**38**	**100%**

The majority of 2000 SIDS deaths occurred while a parent was caring for the infant, and most occurred during November and December. SIDS deaths usually occur during winter months. During Iowa's six coldest months (October, November, December, January, February and March), 21 SIDS deaths (55.3%) occurred. This was an unusual year, however, since 15 (39.5%) deaths occurred during the late spring and summer (May-September).

SIDS Deaths by Month

Month	Number of Deaths
January	3
February	2
March	2
April	2
May	4
June	4
July	4
August	1
September	2
October	2
November	6
December	6
Total	**38**

Care Provider at Time of Death

Provider	Number	Percent
Parent	29	76.3
Grandparent	1	2.6
Child Care	8	21.1
Total	**38**	**100%**

Risk factors for SIDS include prenatal smoking, secondhand smoke exposure after birth, inappropriate sleep surface, inappropriate (soft, porous) bedding, overheating and most especially, prone sleeping position. Bed sharing is becoming an enormous risk. Ten of the infants dying from SIDS were sleeping with at least one adult or with a sibling in an adult bed or on a sofa.

Prenatal Smoking by Mother for Infants Who Died of SIDS

Smoking	Number	Percent
Yes	20	52.6
No	16	42.1
Unknown	2	5.3
Total	**38**	**100%**

Secondhand Smoke Exposure by Infants Who Died of SIDS

Exposure	Number	Percent
Yes	27	71.1
No	4	10.5
Unknown	7	18.4
Total	**38**	**100%**

Over half the mothers of SIDS babies smoked during pregnancy. Since smoking is self-reported on birth certificates, it is likely that the actual number of prenatal smokers was much greater. Alarmingly, 71.1% of SIDS infants were routinely exposed to second hand smoke **from at least one** source after birth.

Bedding at Time of Death for Infants Who Died of SIDS

Bedding	Number	Percent
Inappropriate	21	55.3
Appropriate	9	23.7
Unknown	8	21.1
Total	**38**	**100%**

Sleep Position at Time of Death for Infants Who Died of SIDS

Position	Number	Percent
Face Down	17	44.7
Side	6	15.8
Face Up	11	29.0
Unknown	4	10.5
Total	**38**	**100%**

Thermal Environment at Time of Death For Infants Who Died of SIDS

Bedding	Number	Percent
Inappropriate	5	13.2
Appropriate	8	21.1
Unknown	24	63.2
Total	**38**	**100%**

Research has shown that placing a baby down for sleep on its back, on a firm mattress in a crib of its own, without soft bedding, including blankets, stuffed animals or bumper pads **reduces** the incidence of SIDS deaths. Clearly, most of the infants dying in 2000 from SIDS were exposed to a variety of risks in their sleep environment. More than 55% were exposed to unsafe bedding. Nearly 45% were placed in a prone position, and another 15.8% were placed on their side for sleep. Literature indicates that prone position carries 9 times the risk of back position, while side carries 2 times the risk of back sleeping.

In recent years, there has been a significant increase in bed-sharing which puts infants at risk, not just from possible overlaying by a parent or sibling, but from heavy, porous bed covers and pillows on an adult sleep surface and from overheating when exposed to adult body heat. Breast-feeding is very beneficial for infants and is strongly advocated by the CDRT. However, many breast-feeding experts promote bed sharing to ease access for the infant. The hazards of the adult bed should preclude such advice as the statistics suggest. In 2000, 26.3% of babies succumbing to SIDS were sharing a sleep surface with an adult or older sibling.

Sleeping Location at Time of Death for SIDS Cases

Location	Number	Percent
Adult Bed – Bed-sharing	6	15.8
Adult Bed	3	7.9
Bassinet	3	7.9
Car Seat	3	7.9
Crib	8	21.0
Floor	2	5.3
Floor On Blankets	2	5.3
Playpen	2	5.3
Sofa Bed-sharing	4	10.5
Sofa	4	10.5
Waterbed	1	2.6
Total	**38**	**100%**

For comparative purposes, SIDS rates are expressed as the number of deaths per 1000 live births. In 2000, the total number of births in Iowa was 38,250. Iowa's **SIDS occurrence rates for** the past 8 years are as follows:

- 1993 – 1.43 deaths per 1000 live births
- 1994 – 1.37 deaths per 1000 live births
- 1995 – 1.22 deaths per 1000 live births
- 1996 – .73 deaths per 1000 live births
- 1997 – .82 deaths per 1000 live births
- 1998 – .86 deaths per 1000 live births
- **1999 – 1.28 deaths per 1000 live births**
- **2000 – .99 deaths per 1000 live births**

Based on preliminary data for 2000, the national SIDS mortality rate was .529 per 1000 live births.

When Iowa's SIDS deaths increased in number by 50% (from 32 to 48) between 1998 and 1999, the Iowa Department of Public Health (IDPH), the Iowa Child Death Review Team, and the Iowa SIDS Alliance joined forces to take aggressive measures to halt the increase.

In January 2001, IDPH and the Iowa SIDS Alliance sent a letter to all hospital administrators in the state. The 1999 SIDS statistics and current SIDS educational materials were enclosed. Hospitals were asked to help stem the rise in SIDS deaths by modeling appropriate sleep position of healthy infants in their newborn nurseries.

Most of the hospitals re-evaluated and revised their policies for sleep position. As the health "experts" that come most closely into contact with the mother for a prolonged period of time directly following a baby's birth, their example is most likely to be mimicked at home. Unfortunately, some Iowa hospitals still resist back sleeping in the nursery for healthy newborns, most usually because the staff adheres to old beliefs that infants placed on their backs soon after birth will choke if they spit up. This has not shown to be the case, but changing attitudes is a slow process.

Many educational seminars on SIDS were offered across Iowa during 2001. In addition, the statewide SIDS conference for professionals was held in October.

More than 100 health and law enforcement personnel attended. CDRT members were among an impressive roster of presenters.

Educating the teachers of parents, grandparents, child-care providers and others who come in contact with infants is the key to reducing risks for Iowa's babies and saving lives from Sudden Infant Death Syndrome.

Suicide

Suicide is a manner of death not previously dealt with by the members of the Iowa Child Death Review Team. As the team expanded its purview to include children ages 7 through 17 years of age, suicide deaths became a primary area where lives could potentially be saved. To improve the team's knowledge base and expertise about suicide, a child psychiatrist was added to the team when the original mental health representative resigned.

In any given year, more males than females successfully commit suicide. Males are more likely to use a violent means of death. The victim may be involved with drugs or alcohol abuse, may have unhealthy social contacts, family problems, be physically or sexually abused or have a history of mental health problems.

Of the 18 suicides of children, 16 were in males. The youngest victim was only 11 years old, and the oldest child was nearly 18. Several had a history of family or school problems, and some had used drugs and/or alcohol. Most of the deaths occurred in rural counties.

Since only a sample of the 18 deaths was thoroughly reviewed by the team, a detailed synopsis of the cases is not available for this year's annual report.

Gender of Suicide Deaths

Gender	Number	% of Total
Male	16	88.9
Female	2	1.1
Total	**18**	**100%**

Ages of Suicide Deaths

Age	Number	% of Suicides
11	1	5.5
12	1	5.5
13	0	0.0
14	1	5.5
15	5	27.8
16	7	38.9
17	3	16.7
Total	**18**	**100%**

Causes of Suicide Deaths

Method	Number	% of Suicides
Drug Overdose	1	5.6
Hanging	4	22.2
Gunshot Wound	13	72.2
Total	**18**	**100%**

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 secondhand 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 in using hospital emergency rooms as their only source of medical care, since 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 and proper administration medicines to young children.

7. Iowa's hard to reach populations, such as certain cultural and ethnic communities, should have culturally-targeted education regarding the necessity for quality and timely prenatal care, 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.

8. Hospitals should evaluate the mental stability and intellectual capacity of mothers prior to discharge after a new baby is born. Referrals to social services, DHS or local Empowerment should be made if there are concerns about a mother's ability to parent.

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-seat or booster-seat) 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 repeatedly demonstrated 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 to 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 not 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. To prevent unsupervised play by curious children, wading pools should be emptied immediately after each use. Likewise, fencing should be put around decorative ponds in residential areas.

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

11. Children less than twelve years of age should never operate an All Terrain Vehicle. 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 only in safe places that are unknown to young children. Parents should teach all children about the dangers of matches and lighters.

16. Children should be well 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.

17. Infants and young children should sleep only in a safety-approved crib and alone. Cribs should not be purchased at garage sales or second-hand stores where they may not meet CPSC requirements.

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 at prenatal visits.

5. Parents of older children should carefully and consistently monitor the friends with whom they associate and enforce strict curfews.

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, child care 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 re-breathing, such as pillows, adult blankets, wide spaces between mattress and sides, crib bumper pads, stuffed toys and small items. Sofas, adult beds or chairs, recliners 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.

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 factor 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.

APPENDIX A
Child Death Review Team Members
and the disciplines they represent

Valarie Campbell, MD
SIDS Coalition

Joseph Cowley, PhD
Substance Abuse Counselors

Lois Fingerman
Domestic Violence

Julia Goodin, MD
State Medical Examiner's Office

Barbara Harre, MD
Pediatrics

Herman Hein, MD
Neonatology

Gerald Loos, MD, Vice-chair
Family Practice

Jan Mackey
Social Worker

Melissa Sally Mueller
Emergency Medical Services

Christine O'Connell Corken
County Attorneys

Richard Rice (to 4/01)
Mental Health

Kevin Took, MD
Mental Health

Lon Walker, Chair
Law Enforcement

Mona Walters
Emergency Room Nurse

Robert Wortman
Insurance Industry

STATE GOVERNMENT LIAISONS

Virginia Barchman
Attorney General's Office

Charlotte Burt
Department of Education

Scott Falb
Department of Transportation

Dennis Klein, MD
Department of Public Health

Jill France
Vital Records, IDPH

Dan Moser
Department of Public Safety

Antonio Montoya
Department of Human Services

STAFF

Stephanie Pettit, PhD
Department of Public Health

Julie Chumbley
Department of Public Health

APPENDIX B

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 under the age of eighteen 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 under age eighteen (18), 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 capacity. 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 under age eighteen, 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 capacity. 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, §2; 97 Acts, ch 159, § 3, 4

Legislative findings and purpose; 95 Acts, ch 147, § 1

Subsection 6 amended

NEW subsections 7 and 8

APPENDIX C

Office of the Iowa State Medical Examiner

Lucas State Office Bldg., 321 E. 12th St., Des Moines, IA 50319-0075

Preliminary Report of Child / Infant Death Scene Investigatior

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. Once completed, this form should be sent directly to the Iowa State Medical Examiner's Office at the address above.

DECEDENT

Name:		SSN:
Home Address:		
Date of Birth:	Date of Death:	Time of Death:

MOTHER

Name:	SSN:
Address:	
Date of Birth:	Other States Where Resided:
Telephone #:	Does mother smoke? ☐ Yes ☐ No
Evidence / History of substance abuse? ☐ Yes ☐ No	

FATHER

Name:	SSN:
Address:	
Date of Birth:	Other States Where Resided:
Telephone #:	Does father smoke? ☐ Yes ☐ No
Evidence / History of substance abuse? ☐ Yes ☐ No	

CAREGIVER AT TIME OF DEATH (if other than parent)

Name:	SSN:
Address:	
Date of Birth:	Other States Where Resided:
Relationship to Decedent:	How long cared for child:
Telephone #:	Does this care provider smoke? ☐ Yes ☐ No
Evidence / History of substance abuse? ☐ Yes ☐ No	

List all other persons living in residence (or present in residence) on day child was found unresponsive			
1] Name:	Date of Birth:	Smoke?	☐ Yes ☐ N
2] Name:	Date of Birth:	Smoke?	☐ Yes ☐ N
3] Name:	Date of Birth:	Smoke?	☐ Yes ☐ N
4] Name:	Date of Birth:	Smoke?	☐ Yes ☐ N
5] Name:	Date of Birth:	Smoke?	☐ Yes ☐ N

POSITION AT TIME OF DEATH

Who found child? (parent, sitter, etc.)

Where was child found? (bedroom, crib, etc.)

Was child moved from original location where found? ☐ **Yes** ☐ **No**

If yes, by whom?

In what position found by care provider? (face up, down, side)

In what position was child placed down? (on stomach, back, side)

What was child's usual sleep position? (back, side, stomach)

Was child sleeping with someone else? ☐ **Yes** ☐ **No**

If yes, with whom? | **Was this usual sleep arrangement?** ☐ **Yes** ☐

In what condition was child found? (warm, cold, still, mottled, etc.)

CLOTHING

Describe child's clothing when found:

BEDDING

Describe bed type where child originally found (crib, adult, waterbed, sofa):

Describe bedding type (baby blankets, adult blankets, pillows, etc.):

HOME WHERE FOUND

Type of home where discovered unresponsive (mobile, apt. etc.):	
Condition of home (clean, orderly, etc.):	
Presence or evidence of:	Tobacco smoke? ☐ Yes ☐ No
Drugs? ☐ Yes ☐ No	Alcohol? ☐ Yes ☐ No
Is there evidence / history of domestic violence in home? ☐ Yes ☐ No	

HOME TEMPERATURE (where found)

Room temperature: °	Heating & Cooling system (describe):

FEEDING HISTORY

When did child last eat?	
What did child last eat?	
Who fed child last?	Who prepared food?
Describe normal dietary habits (foods, amounts, etc.)	

RECENT ILLNESS OR INJURY

Child history (fever, vomiting, cold, etc.):		
Recent injury (bruises, cuts, head injury, etc.):		
Recent visit to physician: ☐ Yes ☐ No	When?	Who?
Why?		
Does family utilize public services? (check all that apply) ☐ WIC ☐ Medicaid ☐ DHS		

HEALTH INFORMATION

Medicine:	
Allergies:	Birth Defects:
Child's primary care physician:	
Last visit to a physician:	When? Why?

Immunizations current? ☐ **Yes** ☐ **No**	**When was last one?**
If within past month, specify type:	
Does child use any home monitors? ☐ **Yes** ☐ **No**	
If yes, was child on home monitor at time of death? ☐ **Yes** ☐ **No**	

BIRTH INFORMATION

Birth weight:	**Length:**	**Birth order:**
Neonatal complications: ☐ **Yes** ☐ **No** **If yes, specify:**		
Birth order:	**Multiple birth:** ☐ **Yes** ☐ **No**	**If yes,** ☐ **twin** ☐ **triplet** ☐ **other**
Was infant full term? ☐ **Yes** ☐ **No** **Gestational age:**		
Any illness or complications during pregnancy? ☐ **Yes** ☐ **No**		
If yes, what type?		
Any risk factors during pregnancy (alcohol, drugs, tobacco)? ☐ **Yes** ☐ **No**		
If yes, what?		

RESUSCITATION

Was basic life support started? ☐ Yes ☐ **No**	**If yes, by whom?**

SCENE DOCUMENTATION

Photos of death scene taken? ☐ **Yes** ☐ **No**
Video taken? ☐ **Yes** ☐ **No**
Property seized? ☐ **Yes** ☐ **No** **If yes, what?**
What agency seized property?

PERSON COMPLETING FORM

Name (please print or type):	
Agency:	
Telephone #:	**FAX #:**
Signature:	**Date Signed:**

(Rev. 5/2000)

Appendix D

Home Safety Assessment

General

1. Electrical outlets are covered or have child-resistant covers.
2. Matches and the lighter are out of young child's reach; homes do not have multiple lighters.
3. Guns are empty and locked in closet and bullets are locked away in a separate place.
4. Car seats are in good repair and appropriate for child. Parents are using them properly.
5. Smoke and carbon monoxide detectors are in good repair. Fire extinguishers are up to date.
6. No drapes and blinds have long, dangling cords that young children can reach; they have ends on them th are child safe.
7. In homes with young children, low tables do not have sharp edges.
8. Potentially dangerous animals can not get to children. Rodent or insect traps are kept out of reach and vie of children. Poisonous plants (Ex: poinsettias) are not within young children's reach.
9. Walls with sharp corners have child covers on them.
10. Computers have child blocks on them.
11. In homes with young children, water is not left standing in tub, buckets, or sink.
12. The home is reasonably clean and the temperature is a safe and healthy 70 degrees.
13. The hot water heater is set at 120 degrees maximum so no water from any faucet can cause a burn.

House Structure

1. Homes with low windows have them blocked to prevent young child from climbing out.
2. There are no broken windows with exposed glass shards or broken windows are taped.
3. Screens are secured so they can not be easily pushed out.
4. Doors close completely and can be latched.

Kitchen (in homes with young children)

1. Children can not reach knives and other sharp silverware.
2. Children can not easily turn on stove and pot and pan handles are turned toward middle of stove.
3. Chairs and stools are not left near counters or stoves.
4. Cleaning supplies, alcohol, poisons, etc. are left in their original containers and are kept where young children can't reach them.

Bathroom (in homes with young children)

1. Children can't reach the medication, cleaning supplies or other hazardous materials.
2. Water is not left standing in the tub.
3. Foam suction mats in tub prevents falls.
4. Fans and other electrical appliances are not left near the tub or shower.

Bedrooms

1. Each child has a bed or crib that is sturdy.
2. The crib has no soft items that might cause choking, suffocation.
3. Cribs and beds are not placed directly over heat registers, by radiators, or near electrical outlets.
4. Each mattress fits the bed or crib so child can not become trapped between it and frame.

Stairs

1. Gates are in good working order are in homes with infants and toddlers
2. All stairways are free of clutter and in homes with young child have a night light, too.
3. Stairways have a railing adequately fixed to wall to support several pounds.

Yard

1. If yard has a fence, it is in good repair and young child cannot open the gates or slip between the boards o fence.
2. If there is any type of pool or standing water in the yard, the area is fenced so child can not get to it witho assistance from older person or the pool is drained unless it is in use.