SPOKANE COUNTY
CHILD DEATH REVIEW COMMITTEE

REPORT OF ACTIVITIES, 2000-2001

SPOKANE, WASHINGTON
DECEMBER 2002

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FORWARD

Since the early 1980s, health and social service professionals in many locations in the United States have developed effective models for reviewing child deaths. Rising numbers of child maltreatment deaths have been one major factor in the call for a comprehensive, multidisciplinary approach to child death review. In 1990, the United States Advisory Board on Child Abuse and Neglect declared the maltreatment of children to be a national emergency. In 1992, in re-authorizing the Child Abuse Prevention and Treatment Act, Congress mandated the U.S. Advisory Board to report, "...on how our nation might develop a more reliable national data collection system on child abuse fatalities, how we might promote a better federal response to this tragedy, and what steps should be taken to prevent child maltreatment fatalities."* In Spokane County, an attempt at coordinated, multidisciplinary review began when professionals asked the following questions:

- What do we know about child deaths in Spokane County?
- Are some of the child deaths occurring in Spokane County either preventable or mislabeled?
- Can agencies charged with child death investigation improve interagency communication?
- Can we identify and/or develop strategies to prevent some child deaths?
- Are there unrecognized trends in Spokane County child deaths that require public health interventions or responses from other agencies?

Spokane professionals from the Spokane Regional Health District, child advocacy agencies, the medical community, law enforcement, the Medical Examiner's Office, the Emergency Medical System, the Department of Social and Health Services, and the Prosecutor's Office have donated many hours of volunteer time to make this effort possible. The Spokane County Child Death Review Committee (SCCDRC) reviews child deaths to understand better the actual causes and contributing factors for deaths of children in Spokane County. By characterizing patterns of child death here, the SCCDRC may help this community develop strategies to prevent unnecessary loss of life in childhood.

In 1997, Governor Gary Locke issued an executive directive to create a statewide child death review system. After an initial planning and development period in 1997 and 1998, the Washington State Department of Health (DOH) organized a DOH Child Death Review Program (DOH CDRP) within their Maternal and Child Health Division. The DOH CDRP assists local teams to perform multidisciplinary, countywide reviews in all jurisdictions. Workgroups from a spectrum of agencies and professions have developed standards for data collection and guidelines for the review process that DOH has distributed widely. Teams have been assembled in all Washington State local public health jurisdictions that have performed local death reviews, and child death review data has been assembled from every region of the state and presented in published reports. Because fiscal concerns repeatedly have made State funding for child death review uncertain, DOH CDRP has faced trying challenges in organizing a child death review system that will remain operative and productive in the long term. Nonetheless, comprehensive, coordinated statewide child death

review is taking shape as an attainable goal worthy of the sustained effort and support of many concerned professionals.

The report for years 2000-2001 represents the transition for SCCDRC from an autonomous reviewing body to a functional participant in a statewide child death review system. In addition to highlighting local issues of risks, health, and safety of children, the information obtained informs a statewide process with similar concerns seeking broader, more pervasive trends. Beginning in year 2000, Spokane county child death review data has been collected using the relatively more complex database instruments and data definitions developed by the DOH CDRP, with Spokane county representatives as active participants. The technology of this informative process continues to evolve with anticipated web-based approaches in the coming year. However, the goal of vigilance for preventable causes of child deaths has remained constant.

* Alexander, R, Ed: *The APSAC Advisor,* American Professional Society on the Abuse of Children, V. 7, No. 4, Winter 1994, p. 3 ff. (see bibliography)

SPOKANE CHILD DEATH REVIEW COMMITTEE ROSTER

Sally Aiken, MD	Spokane County Medical Examiner and Forensic Pathologist
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Cathy Fritz, RN, PHN	Nursing Supervisor, Spokane Regional Health District
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Deborah Harper, MD	Pediatrician, Spokane County Medical Society President
Linda Jackson, PHN	Public Health Educator, Child Injury Prevention Program, Spokane Regional Health District
Mary Ann Murphy	Casey Family Partners
Connie Mutton, RN	Sacred Heart Medical Center
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Jeff Rittenhouse, EMT	Spokane County Emergency Medical System
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- Spokane School District 81
- Washington State Patrol
- DSHS Division for Developmental Disabilities
- Spokane County Drowning Prevention Coalition

ACKNOWLEDGMENTS

The Spokane County Child Death Review Committee (SCCDRC) would like to give special recognition and thanks to the following professionals who donated time to assist in the process of reviewing child deaths and in the development of this report. In the words of Dr. Michael Durfee, founder of the Los Angeles County team, child death review teams have expanded rapidly, "... essentially without money or mandate. ...multi-agency staff who are on or near the line seem naturally to know the value of working together." The painful awareness of professionals who work closely with these unfortunate families compels them to seek prevention strategies, protection for survivors, and justice for the dead.

Our special thanks to past members of the SCCDRC, Spokane professionals listed below whom willingly volunteered their time to help in this effort.

Former SCCDRC Members:

Dexter Amend, MD,
Spokane County Coroner (retired)
Mary Ann Brady, Spokane County
Prosecuting Attorney's Office
David Crump, PhD,
Spokane Mental Health
Sergeant Jerry Frye,
Spokane Police Department
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Dee Wilson,
Child Protective Services, State of
Washington Department of Social and
Health Services
Sergeant Dennis York, Spokane County
Sheriff's Department (retired)

We also would like to offer a special thanks to:

John A. Beare, MD, former health officer of Spokane Regional Health District (SRHD). Dr. Beare's unwavering commitment and support sustained the SCCDRC from its inception through its early years;

Kim M. Thorburn, MD, current health officer, for her continuing support;

Deborah Icenogle, MD, for nearly a decade of earnest work and enthusiasm, in small part, as contracted expertise; and for the most part, as countless volunteered hours for an issue she imbued with impassioned commitment, and now reengaged in the Spokane Child Death Prevention Action Team;

Paul Stepak, MD, for many hours of labor in preparing this report and other reports, and supporting the technical aspects of child death review in Spokane County; and

Mary Ann Korhonen, SRHD Staff Support Specialist, for her organizational and supportive skills.

ORGANIZATION OF CHILD DEATH REVIEW IN SPOKANE COUNTY

The Spokane County Child Death Review Committee (SCCDRC) is composed of professionals from many fields who gather monthly to review data relating to any deaths of children within Spokane County. The committee has as its stated mission:

Mission Statement

> "The purpose of the committee is fundamentally that of professional education. By their participation, committee members improve interagency communication and cooperation, and develop recommendations necessary for system improvements in child death investigation.
>
> "The Spokane County Child Death Review Committee reviews extensive pertinent information on child fatalities occurring in Spokane County to determine what, if any, information or responses might have prevented the fatalities. The Committee develops strategies to identify and address local issues and trends affecting child fatalities and advocates for change where appropriate."

To pursue the overall mission it had defined for itself, the Committee developed a set of graduated, outcome-oriented goals. Although they were chosen so that each could be pursued independently, advances in each area potentially could facilitate the others. The goals of the SCCDRC are:

Spokane County Child Death Review Committee Goals

- Describe patterns and trends of child death in Spokane County.
- Improve interagency cooperation and communication in child death investigation.
- Educate professionals about child death investigation.
- Improve the sources of data collection by developing forms and protocols for autopsy, death scene investigation, medical record review, and social service review.
- Exemplify a model for multidisciplinary countywide child death review.
- Participate in a system for aggregate data collection analysis and reporting.
- Coordinate with State-level child death review system: provide child death review data to the DOH CDRP so they can examine population-based issues more broadly.

In 1993, the Washington State legislature enacted a law defining the purpose and rules governing local mortality review teams for infants who died at less than one year of age. It enabled the SCCDRC to conduct more thorough reviews of infant deaths using any pertinent data available

from each of the member agencies while still maintaining medical and legal standards of confidentiality. In January 1994, new legislation sanctioned extending comprehensive reviews to deaths of all children from birth through age 17. At that point, child death reviews in their current format began in Spokane County.

Legal Issues and Confidentiality

In 1993, the Washington State legislature enacted laws codified in RCW 70.05.170, "Infant Mortality Review", which helped clarify and define the need, purpose, and legal operation of death review teams for infants less than one year of age. The statute does not prescribe the membership of the teams other than citing, "local health department officials and employees, and health care professionals," and calling for a "…team of professionals in order to identify modifiable medical, socioeconomic, public health, behavioral, administrative, educational, and environmental factors." In January 1994, Washington State Senate Bill 5205 revised RCW 70.05.170 as "Child Mortality Review", extending comprehensive reviews to deaths of all children from birth through age 17 (i.e., up until the eighteenth birthday). (See Appendix A.)

In the 1997, Legislative Session, RCW 43.79.445 was amended to provide that, "Funds from the death investigations account may be appropriated during the 1997-99 biennium for the purpose of the statewide child mortality reviews administered by the department of health." Also, a budget proviso in SHB 2259, section 212 (19) mandated that some funds in the death investigations account appropriation would be provided solely for the implementation of statewide child mortality reviews. Local health jurisdictions will coordinate child mortality review protocols and serve as the appointing authority and lead agency for local child death review teams.

The enabling legislation for child death review committees specifies that all proceedings and records are held confidential and immune from subpoena or discovery. According to opinions communicated from representatives of the Washington State Attorney General's Office, this statute's principles of data confidentiality extend to data reported to DOH CDRP comparably to the confidentiality of communicable disease reporting. The statute does not prohibit or restrict the reporting of child abuse or neglect in cases which the SCCDRC has reviewed. Such reports, however, take place through the usual reporting protocols to agencies mandated to investigate them and not through the SCCDRC.

The SCCDRC provides all Committee members and visitors with a copy of this statute and has them sign a confidentiality statement consenting to abide by it. (See Appendices B1 & B2.) Committee attendees take no notes at the meetings regarding the cases discussed, and minutes do not include case history identifying information. All case-identifying data are maintained as secured, confidential information available to SCCDRC members exclusively for the purpose of child death review and compilation into aggregated reports by local and state departments of health.

Obtaining access to records can be a complex issue for the SCCDRC. The Committee has been working to define the extent to which records will be available for review including medical records, vital statistics records, and other data. To that end, it has sought the advice, assistance, and cooperation of other agencies including the Washington State Center for Health Statistics and the Washington State Attorney General.

State Level Activities

The Washington State Child Death Review and Prevention Team, a multidisciplinary group which met from 1990 through 1998, included representatives from State, local, and federal agencies involved in providing services to children and families and collecting information about children's health, as well as legal and law enforcement agency staff. A representative of the Spokane County Child Death Review Committee regularly attended the State team meetings. The State team did not do direct, centralized case reviews. It encouraged local teams drawn from community agencies to do individual child death case reviews and promoted child death review in counties throughout the state by disseminating information about comparable efforts elsewhere.

In 1997, Governor Gary Locke issued an executive directive to create a child death review system. At Governor Locke's request, Secretary of Health Bruce Miyahara appointed the Child Death Review Workgroup that developed the design for a comprehensive child death review system involving every county in Washington State. The goal of the system is to reduce preventable deaths among Washington's children. The Workgroup issued a position paper, "Recommendations for A Child Death Review System for Washington" in January 1998.

DOH dissolved the Washington State Child Death Review and Prevention Team in 1998 in order to restructure the underlying organization more suitably for an integrated, statewide child death review system. Several workgroups were created to develop a standardized dataset for local teams to use, to develop policies and procedures by which local child death review teams can operate, and to define the relation between local teams and the Department of Health Child Death Review Program (DOH CDRP). As it is now structured, local health jurisdictions serve as the appointing authority and lead agency for local, multidisciplinary child death review teams. The local teams develop protocols incorporating data standards and processes consistent with DOH CDRP guidelines and data tools. Local teams conduct reviews of sudden or unexpected deaths of children from birth through seventeen years of age.

In the years following 1999, child death review data that local teams generate is transmitted to the DOH CDRP Data Repository Quarterly. DOH technical staff aggregate and analyze the data for issuance as statewide reports, which serves as an informative resource to local teams as they perform actual reviews. In 1999, the DOH CDRP developed and distributed a first draft of a standard format child death review data collection form. Initially this form was provided in hard copy with an associated instruction set. Since 2000, DOH CDRP and all local child death review teams in Washington have employed a computerized database application, distributed locally

and maintained centrally, to allow local teams to collect and maintain comparable information. As a result, all SCCDRC reports for data collected in 2000 and thereafter will reflect that standard format. In 2003, the DOH CDRP has plans to launch a web-based application to facilitate transfer of child death review data from local committees to the state databases simplifying the coordination and maintenance of data handling operations.

Local Activities

In 2002, the SCCDRC instituted a new approach to the child death review data it gathers to make the information more visible and translate the message into actions. A separate committee, the Spokane Child Death Prevention Action Team (SCDPAT), was formed both with some SCCDRC participants and with other community members not directly involved in child death review. This group has an objective of direct action within the Spokane community directed toward specific projects suggested by child death review data. The initial project has been to increase public awareness of the interrelation between safe sleep practices and diminished incidence of SIDS deaths. To that end, SCDPAT has obtained grant funding for public messages, created a "Safe Sleep" public service announcement, and posted attractive signage on public transit about safe sleep practices for infants.

Ethical Concerns

Occasionally, the Spokane County Child Death Review Committee encounters procedural problems with records submitted in the course of reviewing a case. If potential errors or discrepancies in data are discovered, the information is referred through the committee member back to the source agency for resolution. If the data reviewed suggested that a crime, hitherto undiscovered, had been committed, then the agency with clear responsibility in that area (such as Child Protective Services or law enforcement) would investigate and resolve the issues according to its own internal protocols. Since the SCCDRC does not have a mission of case investigation, it does not duplicate the activities or maintain oversight of any participating agency.

Child Death Review Committee Procedures

The SCCDRC is a multi-agency group composed of representatives with a broad range of training and expertise. It does not duplicate the data collection, analysis processes, or specialized investigative roles of any single, constituent agency. For example, the committee does not attempt any sort of "morbidity and mortality" medical review such as hospitals employ as part of their quality assurance activities; nor, the complex legal evidentiary analysis appropriate to law enforcement agencies and prosecutors. The primary focus, both in individual case reviews and in aggregate data, is whether a child's death, a group of deaths, or a type of death may be preventable by some means.

By examining information assembled from multiple agencies and sources, the committee has a better opportunity to observe the way community-wide problems can present distinct aspects to different agencies. Underlying determinants of the circumstances leading to a child death are more easily recognized when presented collectively and from different points of view. Conducting reviews of resident child deaths can reveal recurrent patterns undetectable by selective review and prevent misplaced emphasis on factors that, though dramatic, occur only sporadically.

The SCCDRC meets monthly to consider cases of children whose deaths have been reported to the Spokane Regional Health District Vital Records Office. From 1994 through 1998, these deaths included all children from birth through 17 years of age who died in Spokane County, regardless of their county, state, or country of residence. No fetal deaths were reviewed. The committee's experience was that out-of-county occurrence child death case reviews often were ineffective; lacking necessary portions of data despite substantial resource and staff time spent seeking them. Furthermore, the implementation of a State child death review system increases the likelihood that each case will be reviewed in the decedent's county of residence, which relieves SCCDRC of the need to assure adequate review of those cases. These factors led SCCDRC to choose to review only Spokane county resident cases for 1999 cases onward unless there is some compelling issue for local review of a specific out-of-county case. Such issues might include aspects of a nonresident death that highlight a problem potentially affecting health or safety of Spokane County residents, or at the request of another jurisdiction to use SCCDRC resources to facilitate their own local review process.

The data sources for case review include: death certificates, autopsies, medical records, records from Department of Social and Health Services Child Protective Services (CPS) and other social service providers, from the Medical Examiner's (formerly Coroner's) office, the City of Spokane Police Department, the Spokane County Sheriff's Department, Spokane County Prosecuting Attorney's Office, Spokane County Emergency Medical Services, Spokane Regional Health District Community and Family Services, Community Mental Health, and Casey Family Partners (a regional center for child abuse and neglect). As needed for specific cases, SCCDRC has requested presentations from school district representatives, hospital intensivists, suicidologists, medical equipment manufacturing representatives, and other professional consultants.

Death certificates also were assessed for adequacy. The death certificate is considered to provide adequate information if the manner of death, cause of death, circumstances of death and certifier (usually the Coroner/Medical Examiner, attending physician, or their designee) are all noted on the death certificate; the certifier is qualified; and the information recorded is correct, within the limits of the Committee's evaluation. Because the Committee often had limited access to medical records and did not have a nosologist at its disposal, it did not focus on precise verification of death diagnoses according to the International Classification of Diseases (ICD9) coding system. Death diagnoses were considered adequate if they were consistent with the medical history available and a common-sense interpretation of the circumstances of death. Although simplistic, this approach left very few diagnoses problematic.

For the years 2000-2001 death reviews, the data elements were defined by the Washington State Department of Health Child Death Review Database, Version 3.0, an application distributed to

all working teams in Washington State. For the most part, this corresponds well to the categories of information included in the SCCDRC database instrument formerly in use, but is substantially more detailed as separate data elements rather than expository text. By local death review teams submitting data in this more distinct format, DOH CDRP is better enabled to aggregate the elements into statewide data.

Maintaining the confidentiality of case-identifying information is a primary concern at each stage of data collection and analysis. In collecting and aggregating such information, another important consideration is to develop the capacity to produce reports that are comparable with the products of other states and localities. Prior to 1999, there was no established, statewide minimum data set for child death review. Each local committee used methods and models consistent with the concerns of its community and commensurate with the resources at its disposal. In 1999, under the leadership of DOH, multiagency workgroups developed a standardized data collection instrument, first in hard copy form and then as a computerized database application, and consensus guidelines for child death review procedures. For data from 2000 and thereafter, SCCDRC adopted this methodology. As child death review committees become more established within Washington State, the incentives to use consistent methods hopefully will promote local acquisition of coherent, comparable data.

Significantly, deaths of Spokane County residents who die in other localities are not reported locally, nor are data presumptively available for local review. There is a data system for Early Notification of Child Deaths (ENCD) at the Washington State Department of Health, Center for Health Statistics. ENCD has expedited the review of some out-of-county deaths of children in their county of residence. The DOH Child Death Review System staff and local child death review teams are discussing strategies to make agency records available to out-of-county local teams for review.

Child Death Review Methods and Definitions

The methods described in this section pertain to the review of 2000 through 2001 SCCDRC records using the data instruments and protocols distributed by the DOH Child Death Review Program. For this period, the child death review application has been the Washington State Department of Health Child Death Review Database, Version 3.0, a Microsoft Access 97 program. It allows records to be entered and maintained locally in a Microsoft Access-based (*.mdb) format. The application includes a function that permits generation and encryption of periodic reports that can be recorded and transmitted by various means to DOH CDRP. These approaches will be modified in 2003 by a transition in the review process to incorporate internet-based technology for data collection, transmission, and report generation. New protocols are being developed by DOH Child Death Review Program staff and technical consultants, along with local review team participants.

SCCDRC Data Summary Review Records

As each case is considered, the SCCDRC completes and retains a computerized, summary evaluation data record. The data record is divided into nine sections.

Section I (Death Certificate Information) contains items found on the death certificate submitted to the SCCDRC Vital Records Deputy Registrar including: name, dates of birth and death, place of death, manner of death, death diagnoses, whether the case was referred to the Medical Examiner, and whether an autopsy was performed.

Section II (General Information) contains further identifying information such as residence address and insurance data. It also describes race and ethnicity, family members, and includes questions regarding abuse, neglect, and Child Protective Services referrals.

Section III (Circumstances of Death) contains nine subsections about categories of death of special interest: fires, [other] burns, firearms, sudden infant death syndrome (SIDS), drowning, poisoning and drug intoxication, vehicular injury, and all other circumstances. Each category has a tab which, when selected, brings up a page of questions pertinent to the selected topic. The "Other Circumstances" tab gives rise to a narrative text frame (Section VIII).

Section IV (Additional Information) contains fields for injury deaths regarding location, intentionality, perpetrator(s) history, drug/alcohol and other impairment issues, and risk factors for injuries/homicide/suicide.

Section V (Infant Deaths) records information regarding birth (gestational age, birth weight, prematurity, etc.) and gestation including drug/tobacco/alcohol gestational exposure, and prenatal care.

Section VI (Records for Review) lists the potential sources for data, whether records were available, and whether there were problems obtaining the records or with their content. For each problematic area there is a narrative text frame allowing a description of the issue.

Section VII (Committee Conclusions) summarizes in nine subsections the SCCDRC conclusions regarding each case. For each there is a narrative text frame in which to describe the issues. The specific questions asked are:

- Was physical abuse a factor in this death?
- Was neglect a factor in this death?
- Was delayed/inadequate medical attention by a caregiver a factor in this death?
- Did panel members concur on the cause of death?
- Did panel members concur on the manner of death?
- If an autopsy was not conducted, might an autopsy have provided additional useful information, given all that is known at this time?
- Were agency policy or practice issues raised as a result of this review?
- Were system issues raised as a result of this review?
- In the committee's estimation, was this death preventable? What prevention strategies are currently in place or might be used to address this type of death?

Section VIII (Narrative) - in which data can be recorded as expository text, rather than specific, individual, data entry fields.

Section IX (Review Information) describes which committee members were present for the review, whether the case was referable to the DSHS system, which team performed the review, and when the review was completed.

Although some data elements can be described with a reasonable degree of certainty, others are sometimes equivocal or problematic. Maltreatment can be an element in deaths that are the result of either intentional or unintentional injury. Intentional or unintentional injury, however, are mutually exclusive categories. Unfortunately, making the distinction sometimes is unclear. Solitary driver, single motor vehicle accident fatalities sometimes are suicides, for instance, and often are indeterminate. Likewise, law enforcement investigations often are required to distinguish unintentional injury deaths from homicides with certainty.

Child death records the Committee reviews may include information regarding abuse or neglect in the decedent's history or in the history of other family members. Often, it is unclear whether the patterns described in the history bear some relation to the terminal events. Limiting the Committee's attention to those few cases with such a definite, causal link would have concealed the pervasive but elusive influence such patterns play in deaths of children. To avoid drawing unwarranted conclusions about causality, the Committee has chosen to report neglect and abuse history as an associated factor, recognizing the limited information that is the basis for evaluation. SCCDRC criteria for neglect include situations in which an isolated lapse in supervision (i.e., not habitual) leads to a child's death. This reflects the committee's focus not on who is at fault, but rather on whether the death could have been avoided or prevented.

Standards for Preventability

In Section VII (Committee Conclusions) the SCCDRC considers in reviewing each child death whether it was **preventable**. A death was considered preventable if, within current or reasonably projected community resources, interventions were available that might have prevented the death from occurring. The SCCDRC designated deaths as preventable only within the limits of its ability to evaluate. For example, in-depth medical practice review or legal analysis of criminal culpability was considered beyond the scope of the committee. Similarly, although some cases of child death can be viewed as the outcome of inadequate social support systems for the children's caregivers, the Committee lacked the data and resources to evaluate social settings extensively. This is a cautious standard for preventability rather than a widely inclusive one, which in the individual cases was less subject to speculation or dispute.

Examples of deaths considered **preventable** by this criterion are:

- Motor vehicle accident deaths in which safety restraints were not used.
- Deaths pursuant to lack of child supervision in dangerous circumstances.

- Deaths involving the impairment of an equipment operator or child supervisor due to drug or alcohol intoxication.
- Deaths involving intentional injury to others with firearms or other weapons.

Preventability was classified **indeterminate** in cases for which the SCCDRC was not capable of meaningfully evaluating particular cases or could not propose feasible interventions, including:

- SIDS deaths, since (despite the apparent effectiveness of the "Safe Sleep" campaign) no single intervention has yet been demonstrated to abate SIDS risks in all cases.
- Suicides, for lack of criteria to distinguish which cases are amenable to intervention and which are not, usually are classified indeterminate. (Of note, in this report several suicide cases were classified as preventable because of the ready access to loaded handguns or verbalized suicide threats by the decedent.)
- Deaths from medical conditions or subsequent to medical treatment which would be more effectively evaluated in the setting of hospital morbidity and mortality review.
- Deaths which involved equivocal legal or investigative evidence of abuse, neglect, or inflicted injury beyond the scope of the Committee to resolve.
- Any record for which data were insufficient for informed judgment.

All other deaths the SCCDRC classified as **not preventable**, including:

- Medical deaths which are an expected outcome of a disease process, such as many severe congenital malformations or childhood cancers,
- Natural disasters, such as floods, forest fires, or hurricanes,
- Extreme prematurity incompatible with life.

Evaluators in other settings (e.g., medical morbidity and mortality reviews and legal proceedings) may have better access to data or more specialized expertise in particular cases. That may enable them to decide whether some of the cases the SCCDRC considered indeterminate potentially were preventable by their standards.

2000-2001 CASE REVIEW DATA AND DISCUSSION

Preventability of Deaths in Spokane County

(For causes of death classified as preventable, see Pages 15 and 16.)

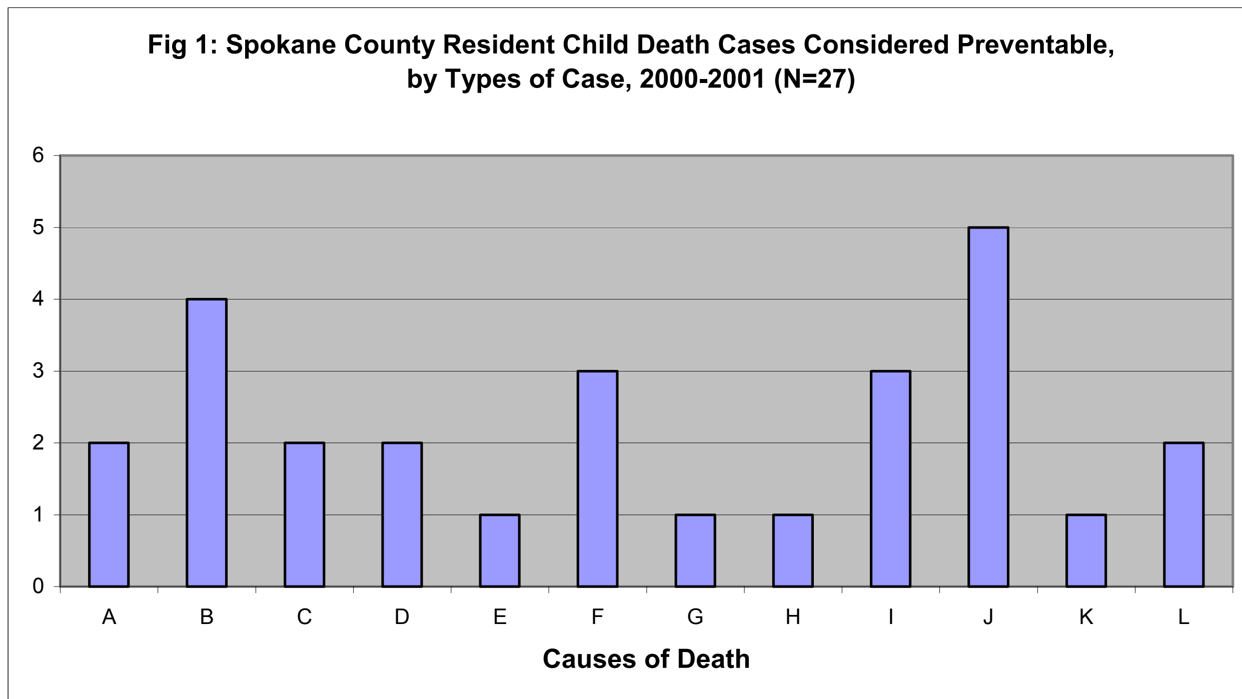


Table 1: Category of Preventable Death	Bar	Number Cases
Natural deaths: gestational infection – missed diagnosis; premature birth following gestational cocaine use	A	2
Motor vehicle crashes (NB: one listed as homicide, four as accidents)	B	4
Pedestrian-motor vehicle accidents	C	2
Toxic ingestion of adults' prescription narcotics	D	2
Toxic ingestion of decedent's prescription narcotic	E	1
Asphyxia from fire	F	3
Boating crash (high speed)	G	1
Anaphylaxis from severe food allergy	H	1
Suicides (two with unsecured firearms and ammunition; one by hanging with unmet need for social service interventions)	I	3
Homicides (two with firearms, two by stabbing, one by dangerous driving practices)	J	5
Undetermined (possibly asphyxia death in uncertain circumstances)	K	1
Drowning (one at a pool staffed with lifeguards, one at a river with friends)	L	2

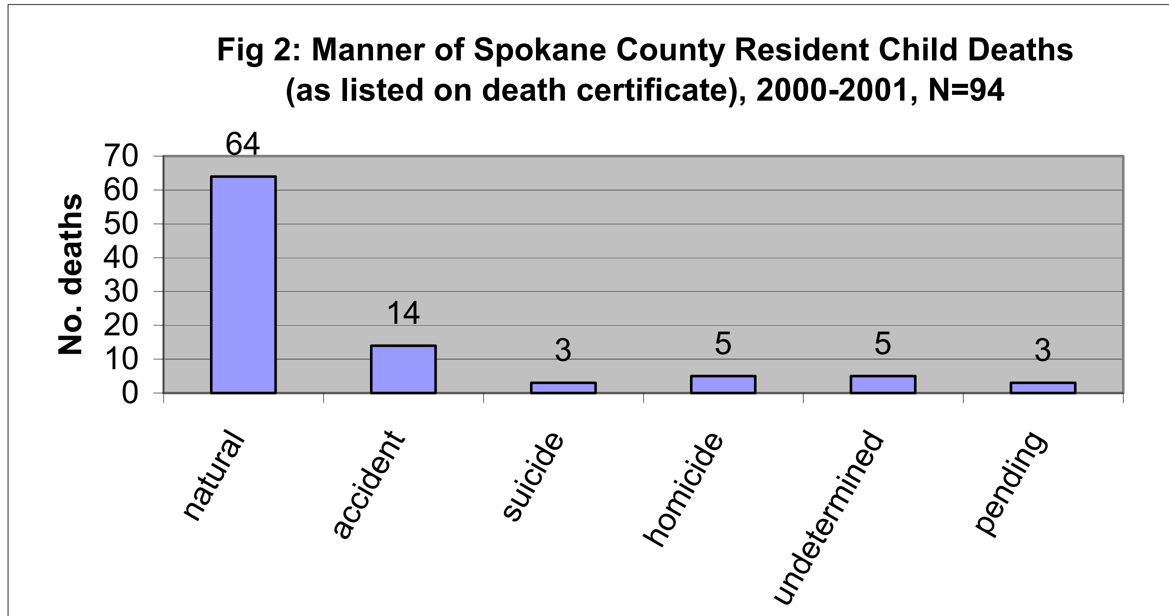
For the 2000-2001 activities report, the Committee considered 94 child deaths, all of them residents of Spokane County. Of these deaths, 27 were considered preventable, 17 of indeterminate preventability, and 50 not preventable. Among the causes and manners of death considered preventable by SCCDRC criteria, most are traumatic in nature. They include: all intentional homicides; those suicides with apparent means of intervention; all accidental deaths amenable to intervention; and those natural deaths for which a readily accessible and widely understood remedy was available but was not provided.

Of the 27 child deaths classified as preventable on 2000 and 2001 death certificates, seven were from traumatic motor vehicle crashes and one was from a boating crash. One case was caused by an anaphylactic reaction, and three deaths were from asphyxiation in a fire. Two deaths were from ingestion of adult, prescription medication. One death was from overdose with a prescribed medication for the decedent. Two cases drowned. Five cases of homicide were classified as preventable including: two gunshot wound deaths, two stabbings, and one motor vehicular homicide. Although in past reports suicide deaths have been considered of indeterminate preventability, the SCCDRC opted to classify the three suicides in this report as preventable. Two natural deaths were considered probably preventable, one because of an inadequately treated medical condition and one because of effects of gestational drug use.

Manner of Child Deaths in Spokane County, 2000-2001

The "manner of death" field in the child death review database is as recorded on the death certificate, unless there is a clear indication that the death certificate entry is erroneous. The death certificate entry field permits five different options—accident, homicide, suicide, pending investigation, or indeterminate—or may be left blank, corresponding to a natural manner of death. As the charts show, the frequency of each manner of death differs according to age groups. Broadly speaking, natural deaths are much more likely to occur in infants and younger children; while young adolescents are more at risk than other age cohorts for accidental, suicidal, or homicidal events. Although proportionally fewer younger children die from unintentional injury deaths, these events do occur, as is discussed in the categorical sections below.

The manner of death can be problematic in some circumstances. For example, suicides sometimes are difficult to distinguish from accidents in unwitnessed events. Likewise, homicides and accidents may be difficult to distinguish in young children unable to generate the characteristic signs on autopsy of resistance or struggle. Because of the prolonged nature of criminal and forensic investigation, case records sometimes are held in a pending status for long time periods until final disposition. Among the cases for 2000 and 2001, of three related cases of asphyxia due to a fire, two were classified as "pending" and the third as "undetermined"; another case of an infant death from toxic ingestion of adult medications also was classified as of undetermined manner. For the sake of analysis in this report they were included in the category of accidental deaths.



NB: 50 natural deaths < 1 year old, 2 undetermined deaths < 1 year old
(2 "pending" deaths by death certificate probably consistent with accidental death)

General Description of Deaths of Children in Spokane County, 2000-2001: Age, Race, Gender

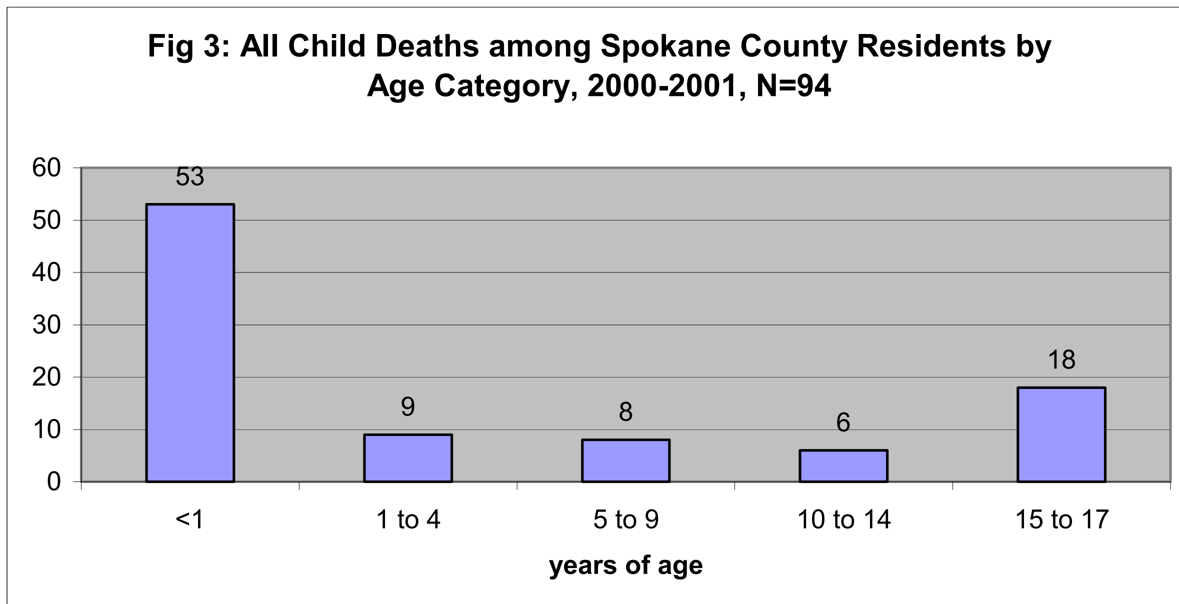


Fig. 4: Race of Spokane County Resident Child Decedents (nonexclusive categories--some multiply listed), 2000-2001

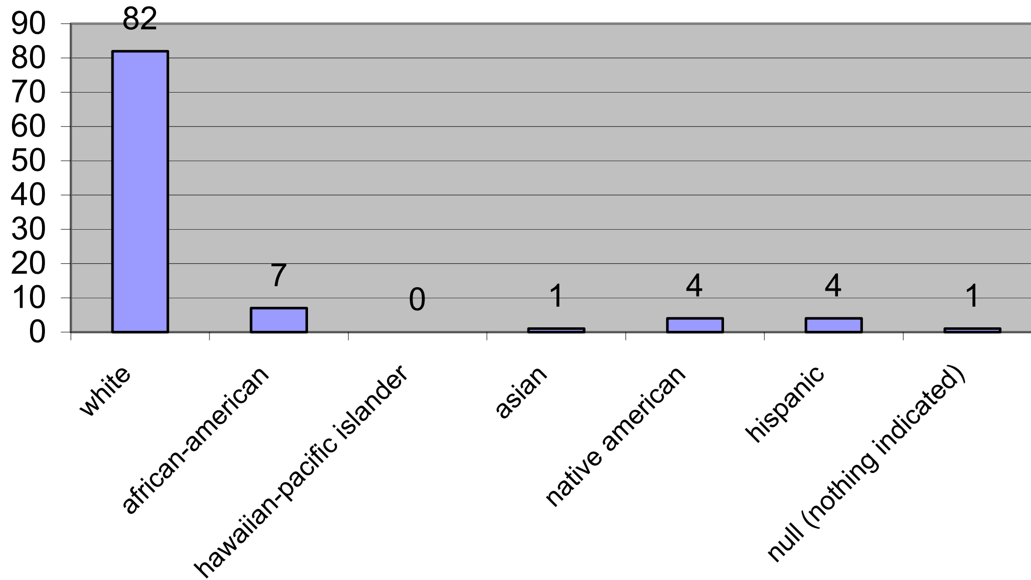


Fig. 5: All Spokane County Resident Child Deaths by Gender, 2000-2001 (N=94)

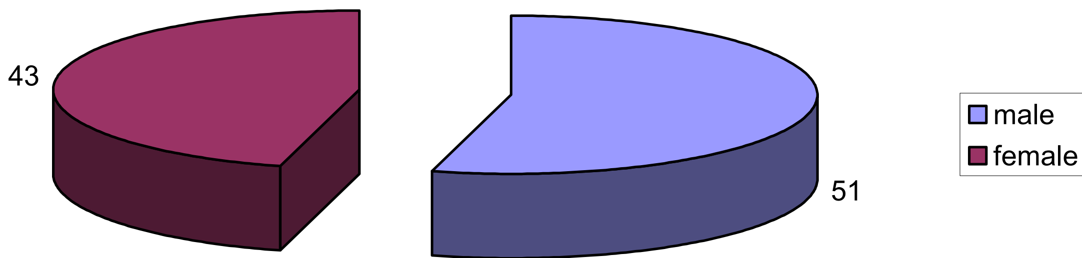


Fig. 6: Child Deaths in Spokane County Residents Less than One Year Old in 2000 and 2001 by Manner of Death

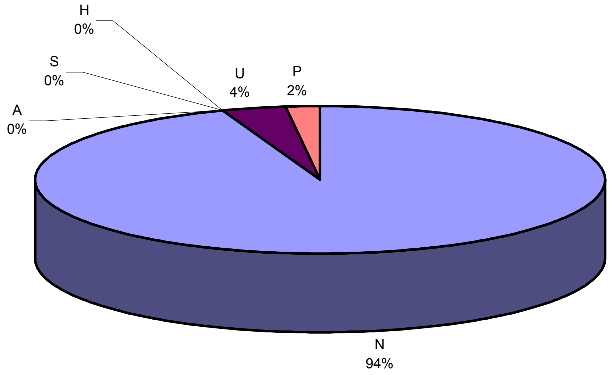
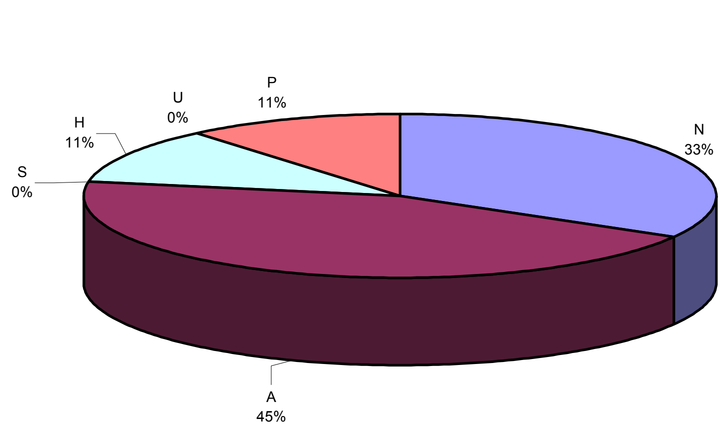


Fig. 7: Child Deaths in Spokane County Residents from One through Four Years Old in 2000 and 2001 by Manner of Death



Legend: N=natural, A=accident, S=suicide, H=homicide,
U=undetermined, P=pending

Fig 8: Child Deaths in Spokane County Residents from Five through Twelve Years Old in 2000 and 2001 by Manner of Death

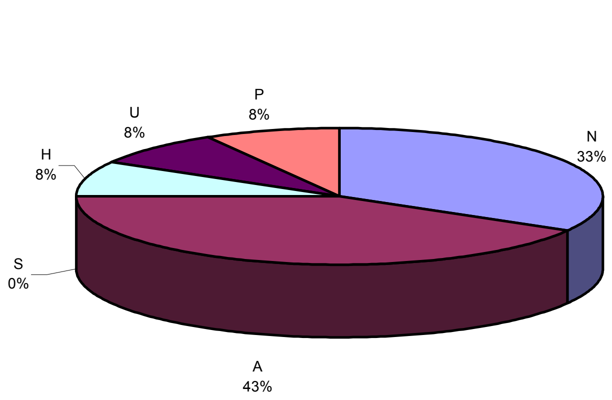
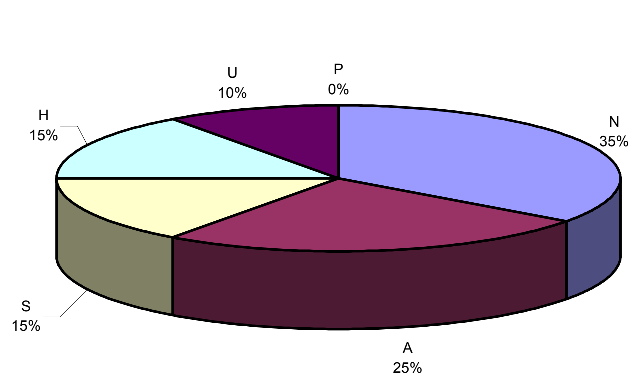


Fig. 9: Child Deaths in Spokane County Residents from Thirteen through Seventeen Years Old in 2000 and 2001 by Manner of Death



CATEGORICAL REVIEW

Accidental Deaths (Unintentional Injuries)

Of the 18 child deaths in 2000 and 2001 among Spokane County residents described in this report as accidents, 14 were so designated on the death certificate. Of the four remaining cases two were designated following forensic inquiry as pending investigation and two as undetermined on the death certificates. For the purpose of review and analysis this report lists the cases as accidents. One death classified as a homicide (and therefore not included among accidental deaths) was a passenger in a vehicle whose driver is one of the accidental car crash cases. SCCDRC considered all the accidental death cases preventable deaths. Eleven were boys and three were girls. Unlike previous years in which more accidents were reported as manner of death in the 13-17 year old group than in any other age category, accidents in 2000 and 2001 appear to have been more evenly distributed among age quintiles from ages one to 17 years (see Figure 11).

Of note, motor vehicular accidents (MVA) accounted for nearly half of accidental deaths. Remaining causes of death were fairly evenly distributed among fire deaths, drowning accidents, and fatal intoxications, with single events of anaphylaxis, an accidental self-asphyxiation by ligature, and a boating collision.

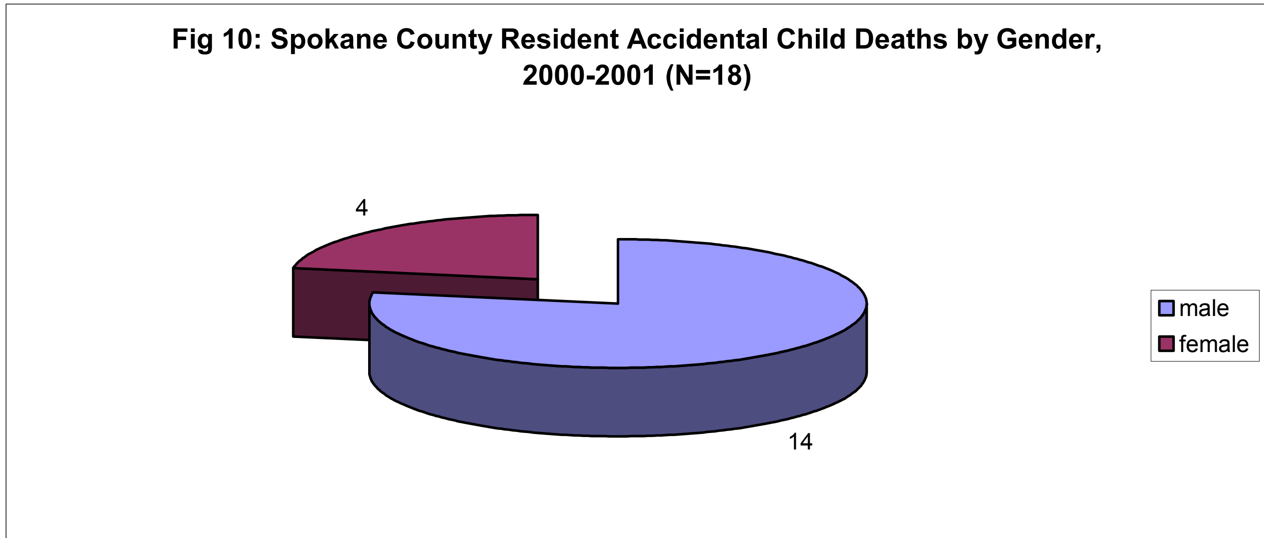
Of the six motor vehicle accident deaths, only one involved documented lack of proper restraints in a collision (e.g., seat belts, bike helmets, etc.). Three involved driver error and one had evidence of alcohol and drug use. Two were pedestrian-motor vehicle accidents; one was an adolescent who ran into traffic late at night, and the other was a toddler who got behind a van backing out of a driveway.

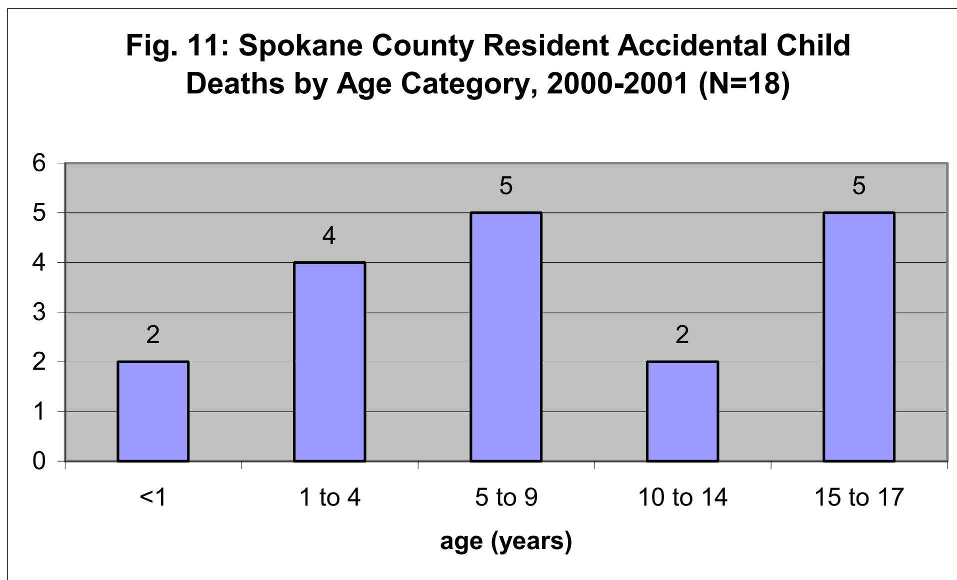
Unlike other types of traumatic injury causes of death (such as violent or suicidal behavior), which are difficult to predict or modify, unintentional injury outcomes can be modified by well-established strategies. Many studies have shown that motor vehicle safety programs and equipment can favorably influence traffic accident outcomes. Seat belts, infant and child car seats, and airbags when properly installed and used, save lives. However, there is often considerable public confusion about how to use car restraints properly and the protection they confer. Similarly, water safety, smoke alarms and fire safety all have been promoted nationwide with many instances in which lives were saved. Among the many safety-related resources for professionals and policy makers are an American Academy of Pediatrics position statement (See: *Pediatrics,* July 1996, v.98, no. 5, "The Teenage Driver"); the Centers for Disease Control and Prevention's National Center for Injury Prevention and Control (http://www.cdc.gov/ncipc/duip/duip.htm, http://www.cdc.gov/ncipc/factsheets/teenmvh.htm); and Safe Ride News Publications, 5223 NE 187th St., Lake Forest Park, WA 98155. (See: http://www.twbc.com/srnfront.html.) Safe Ride News serves as a clearinghouse for information about legislation, trends and technologies relating to motor vehicle safety and children.

Drowning prevention efforts cannot be overemphasized. Spokane County has many lakes, rivers, streams, and pools that pose particular hazards to children and adolescents, especially

when water temperatures are low. Health care providers, recreation specialists, and public health and safety educators would do well to understand the physiologic and behavioral factors that figure into child drowning deaths. (See: *Pediatrics,* January 1993, v.92, no.2, "Drowning in Infants, Children, and Adolescents", and from CDC: http://www.cdc.gov/ncipc/factsheets/drown.htm).

In these areas for which specific public interventions have been effective, continued program support has the best chance to prevent child deaths.





NB: Included here are two undetermined manner deaths (< 1 year old and two "pending" manner deaths by death certificate probably consistent with accidental death)

Table 2: Accidental Child Deaths among Spokane County Residents, Spokane County 2000-2001, Causes of Death by Gender

Cause of Death	All Cases	Male	Female
Motor vehicle accident, passenger	3	1	2
Motor vehicle accident, driver	1	1	0
Motor vehicle accident, pedestrian	2	1	1
Boat crash trauma	1	1	0
Anaphylaxis	1	1	0
Drowning/asphyxia	2	2	0
Positional asphyxia	1	1	0
Ligature asphyxia	1	1	0
Smoke inhalation/asphyxia (on d.c. *, 1 undet., 2 pd.)	3	3	0
Toxic ingestion – decedent's Rx narcotics	1	1	0
Toxic ingestion – other's Rx narcotics (on d.c., 1 undet.)	2	1	1
Total	18	14	4

*d.c. = Death certificate, undet. = Undetermined, pd. = Pending

Table 3: Drowning, Toxic Ingestions, and Motor Vehicle Collision Victims among Spokane County Resident Accidental Child Deaths, 2000-2001, by Age Categories

Cause of Death	All Ages	< 1 y.o	1-4 y.o	5-12 y.o	13-17 y.o
Drowning	2	0	0	1	1
Toxic ingestion	3	1	1	0	1
Motor Vehicle Accidents	6	0	2	1	3

Suicide Deaths

Of the three Spokane County resident child deaths classified as suicides on 2000 and 2001 death certificates, all were 16 years of age or older. Two died from self-inflicted gunshot wounds, and one died from asphyxiation by hanging. The weapon in each of the two firearm suicides was available unlocked and loaded in the home.

Although the SCCDRC in its past reviews has not categorized child and adolescent suicide cases as preventable, many authorities in suicidology propose that, in many persons considering suicide as an option, there are both suggestive signs and potentially effective interventions. In the cases in 2000 and 2001, committee members considered that the easy availability of unsecured firearms and ammunition in homes constituted at least a prospect for preventive efforts. Among the many suicide-related resources for professionals and policy makers are the Spokane County Suicide Prevention Coalition [(509) 324-1596]; QPR Institute, an organization in Spokane with a systematic approach to suicide prevention (See: http://www.qprinstitute.org); Centers for Disease Control and Prevention's National Center for Injury Prevention and Control (See: http://www.cdc.gov/ncipc/pub-res/youthsui.htm ;

http://www.cdc.gov/ncipc/factsheets/suifacts.htm); and the American Academy of Pediatrics' position statement (See: *Pediatrics,* April 2000, v.105, no. 4, "Suicide and Suicide Attempts in Adolescents and Young Adults".).

Homicide Deaths

Of the five child deaths classified as homicides on 2000 and 2001 death certificates, three were between 14 and 17 years old and two were younger than seven years; none were infants. Two cases were stabbing deaths, two were handgun deaths, and one was pursuant to dangerous driving. Of the two homicidal gunshot wound deaths, one resulted in a gang-related murder conviction, and the other was committed with a legally owned and carried weapon. One stabbing death involved an unknown perpetrator, while the other was an acquaintance of the victim. The motor vehicle death was the negligent homicide of a passenger as a result of dangerous driving practices.

Maltreatment Deaths

The number of substantiated child abuse cases reported in America each year far exceeds the number of child maltreatment deaths. In 1992, for example, an estimated one million children were maltreated, but fewer than 2,000 were killed. While most people are aware of the tragedy of child physical or sexual abuse, many are unaware that child neglect can be highly lethal. Child neglect encompasses the failure to provide for a child's basic needs, and/or failure to supervise and intervene appropriately to prevent injury or death. Nationwide, the most common fatal incidents associated with neglect of supervision are fire, falls, drowning, poisonings, and ingestions. Parents cannot prevent all deaths, nor are they held legally to a standard of perfection. Laws in most states hold parents and caretakers to the standard of "reasonable" or "prudent" care.

Because child maltreatment may impair a child's capacity to recover from illnesses, the contribution of abuse or neglect to the outcome of a concurrent disease process such as an infection is not certain. The SCCDRC noted any case of a child death that occurred in an abusive or neglectful setting whether or not the abuse or neglect directly contributed to the death. In the cases the committee reviewed, neglect, abuse, or a lack of age-appropriate supervision usually was well documented.

In reviewing 2000 and 2001 child deaths, the SCCDRC noted 27 instances that suggested circumstances of abuse, neglect, or both, involving 22 cases. In many cases the instance or pattern of maltreatment may not have been directly linked to the death. Among them, five were homicides. Three were suicides with history of abuse or violence in their families or other settings. Eight cases had histories suggestive of inadequate supervision including: two drownings, one driveway back-over death, and three asphyxiations in a fire. Two cases involved inappropriate, though probably accidental, poisoning of children with adult medications. One case involved inappropriate, though probably accidental, overdosing of child with his own

medication. Three involved home situations with potential exposure to violence. Two cases involved noncompliance with medical therapy. One involved inadequate childcare practices. One involved unsafe boating practices.

Table 4: Maltreatment among Spokane County Resident Child Deaths, Spokane County, 2000-2001, by Age Categories (N=22)

Maltreatment Category	All Ages	< 1 y.o	1-4 y.o	5-12 y.o	13-17 y.o
Abuse	10	1	2	1	6
Neglect	17	2	5	5	5
Abuse and Neglect	5	0	2	0	3

Neonatal Deaths

Neonatal deaths are defined as those occurring during the first thirty days of life. From 2000 through 2001, 32 neonatal deaths occurred among Spokane county residents. (In previous reports that also reviewed out-of-county resident deaths consistent with Spokane County's well-recognized role as a medical care referral center, about half the neonatal deaths were nonresidents.)

Table 5: Neonatal Deaths in Spokane County Residents by Categories of Death As Indicated by Causes of Death Listed on Death Certificates, 2000-2001

Categories of Death	Number of Cases, 2000-2001
Prematurity	16
Congenital malformations, general	6
Pulmonary congenital disease	2
Cardiac congenital disease	9
Placental abruption	4
Other ischemic injury	2

(N.B.: Decedents may have multiple and /or related causes of death.)

Data for the county resident neonates who died at Sacred Heart and Deaconess Medical Centers from 2000 and 2001 were reviewed. Most of the decedents' mothers were more than 18 years of age, consistent with the greater likelihood of women older than 18 years bearing children. Many of the decedents had birth weights less than 1,000 gm. Self-reported usage patterns of alcohol, tobacco, and drugs were not inordinately high, but many decedents did not have that data in the medical record. Most of the decedents' mothers had obtained some degree of prenatal care.

Although Spokane area physicians and nursing intensivists were very helpful in reviewing neonatal deaths with SCCDRC members, there are many gaps in the information the Committee was able to review. Data resources that characterize neonatal deaths may have value as predictors of successful pregnancy outcomes including: maternal drug or alcohol use, prenatal care, poverty, maternal age, prior maternal child deaths, and the timeliness and appropriateness of referral for tertiary care.

Spokane County Resident Neonatal Fatalities following NICU Admissions at Sacred Heart Medical Center and Deaconess Medical Center, 2000-2001

Table 6a

Maternal Age (m.a.)	Number of Cases
14-17 yr.	4
18-29 yr.	11
30-39 yr.	10
40 yr. and older	0
Unknown m. a.	7

Table 6b

Gestational Age (g.a.)	Number of Cases
<20 wk.	0
20-29 wk.	14
30-39 wk.	9
40 wk. and older	1
Unknown g. a.	7

(N.B.: 1 record stated “premature” without gestational age)

Table 6c

Birth weight (b.w.)	No. of Cases
≤ 1,000 gm	12
1,000 < 1,999 gm.	1
2,000 < 2,999 gm.	6
3,000 gm. ≤ b.w.	3
b.w. unknown	10

Table 6d: Self-reported risk factor history

Risk Factor	Yes	No	Unk
Drugs	1	17	14
Alcohol	0	18	14
Tobacco	6	12	14
No substances abused	12		14
STD history	4	11	17

Table 6e: Medical coverage: DMC and SHMC Neonatal Fatalities

Source	Number of Deaths
Public assistance	10
Private/military	2
Self-pay	1
Unknown	36

Table 6f: Prenatal care

Prenatal Care	Yes	No	Unk
1st trimester	21	0	11
2nd trimester	0	0	11
3rd trimester	0	0	11

(N.B.: two cases described as “erratic” prenatal care)

Sudden Infant Death Syndrome (SIDS)

Sudden Infant Death Syndrome is defined as a sudden, unexpected death in infancy for which no medical cause can be found and which remains unexplained after an adequate post-mortem examination. Conditions extensively associated with SIDS in medical literature—prone sleep position, prior or concurrent respiratory infection, and smoking in the home—are noted.

SIDS should be recognized as a diagnosis of exclusion. Emergency and medical personnel must consider carefully the full differential diagnosis of sudden death in infancy and must perform a thorough, adequate autopsy before applying the "SIDS" diagnosis to an infant death. A complete history, physical examination, toxicology screen, and death scene investigation are necessary to rule out identifiable natural causes, neglect, or foul play. A SIDS death on autopsy may reveal characteristic microscopic hemorrhagic lesions and other tissue markers of chronic or recurrent hypoxia.

SIDS statistics for Spokane County in 2000-2001 show fewer cases than in previous years and compared to those described in Washington State Vital Statistics publications. Victims were predominantly males, and antecedent respiratory infection, gestational problems, soft bedding, and sleep position were issues under consideration (See Table 8). Eight SIDS cases were reported in the two years from 2000 to 2001 as compared to 35 Spokane County Resident SIDS cases from 1996 to 1999. In 2000-2001, SIDS deaths occurred equally in the one to under-four month age group and the four to under-twelve month age group (see Table 12).

Table 7: SIDS Deaths by Age And Sex among Spokane County Residents, 2000-2001

Category	All Cases	Male	Female
All SIDS Deaths	8	5	3
Age <1 month	0	0	0
Age 1 to <4 mo.	4	2	2
Age 4 to <12 mo.	4	3	1
Age 12 mo or older	0	0	0

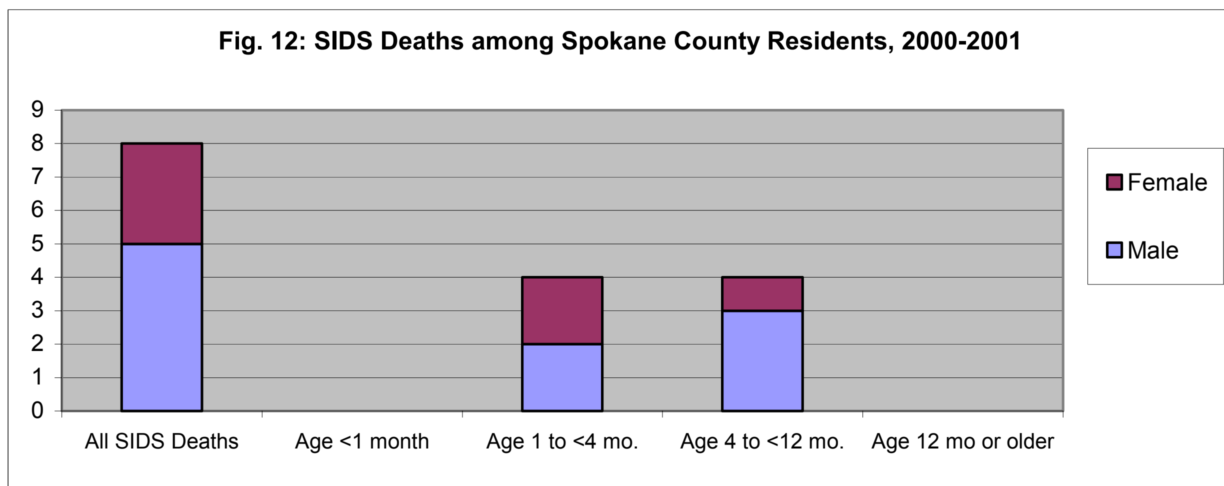


Table 8: Spokane County SIDS Deaths, All Cases, by Associated Conditions, 2000-2001

2000-2001 SIDS Deaths	Body Position Found	Sleeping Location	Bedding Firmness	Co-sleeping (or not)	Illness Within previous 2 weeks	Smoking Exposure	Birth Issues
1 Girl	On back	Adult bed	Unknown	Unknown	Respiratory Illness	Yes	C-Section Breech birth 60-degrees in room
1 Boy	On stomach	Playpen	Soft	No	Respiratory illness	Unknown	Normal
1 Boy	Unknown	Adult bed	Unknown	Yes	Upper respiratory Illness	Unknown	NICU for respiratory infection; apnea monitor
1 Girl	Unknown	Adult bed	Unknown	Yes	Yes	Unknown	Normal
1 Boy	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
1 Boy	On stomach	Floor	Soft	Yes	No	Yes	Perinatal RSV
1 Boy	On stomach	Crib	Soft	No	In hospital for RSV	Unknown	Unknown
1 Girl	On stomach	Crib	Soft	No	"Fussy"	Yes	"Aged Placenta"

(NB: Case reports contained death scene investigations in which associated condition inventories were partial and inconsistently applied)

There are many theories that attempt to explain Sudden Infant Death Syndrome. Abnormal control of breathing reflexes during sleep, metabolic disorders of metabolism of glucose or other substances, adverse reactions to common viruses or bacteria, and abnormalities of temperature regulation in infants are all areas of current research worldwide. Studies in Europe and the USA have revealed an important association between sleep position and risk of sudden death in infancy, especially during seemingly mild respiratory infections. Although some researchers suggest that a portion of infant deaths classified as SIDS may be unrecognized instances of child abuse, the main body of SIDS-related research indicates that SIDS constitutes at least one valid diagnostic entity. (See: *Pediatrics,* Feb 2001, v.107, no. 2, "Distinguishing Sudden Infant Death Syndrome from Child Abuse Fatalities", and Feb 2001, v.108, no. 3, "Distinguishing Sudden Infant Death Syndrome from Child Abuse Fatalities [Addendum].")

Collaborative studies from Europe and Australia have shown decreases in the incidence of SIDS by as much as 50% with public and professional education campaigns to change infant sleeping position. This has led to a nationwide "Safe Sleep" campaign encouraging caregivers to place infants in a supine position for sleep and use proper bedding materials. Since that campaign began, there has been a marked, concurrent fall in the incidence of SIDS deaths, but they certainly have not disappeared. These results should be powerful incentives to professionals, parents, and other caretakers of infants in the United States to follow the American Academy of Pediatrics (AAP) guidelines regarding infant sleep position and avoid prone (i.e., face-down) positioning of infants. (See: *Pediatrics,* March 2000, v. 105, no. 3, "Changing Concepts of Sudden Infant Death Syndrome: Implications for Infant Sleeping Environment And Sleep

Position.") Fluffy or thick, loose bedding also were suggestive hazards to infants in the data we reviewed.

While the exact cause of death in most cases of SIDS remains elusive, current research suggests that Spokane County parents and care providers may be able to decrease the number of local SIDS deaths by aggressively disseminating and following the AAP infant sleep guidelines. The Spokane Child Death Prevention Action Team has promoted public awareness of these issues through public service announcements and visible, appealing signage on mass transit. SCCDRC also advocates activities to improve SIDS death scene investigations and professional education related to SIDS.

Dr. Richard Harruff, MD, PhD, has developed a standardized infant death investigation form currently in use in King County. In June 1996, the Centers for Disease Control and Prevention published in *Morbidity and Mortality Weekly Review* a useful model and reference for death investigators: "Guidelines for Death Scene Investigation of Sudden, Unexplained Infant Deaths: Recommendations of the Interagency Panel on Sudden Infant Death Syndrome", (MMWR 6/21/96, v. 45, no. RR-10). Although these resources are widely available in Spokane County, some obstacles to timely and thorough death scene investigation persist. The members of the SCCDRC encourage local agencies to help identify strategies to resolve these difficult issues.

COMMENTS AND RECOMMENDATIONS

The Spokane County Child Death Review Committee (SCCDRC) was formed a decade ago in this community in response to deaths of children locally that alarmed and dismayed individuals and agency representatives. From the group's inception, committee members expressed hopes that with better understanding of the local issues that put children at risk for injury, abuse, neglect, and death, well-informed, committed individuals could work together to minimize those risks. Over time, different categories of deaths sporadically have arisen in clusters or separate instances, as often occurs in a medium-sized local population. In some years there were more infant homicidal deaths, and in others more numerous suicides, and in others more vehicular deaths. Although there were no sustained, increasing trends, neither were the issues abated; similar cases recurred sporadically, often with comparable risk factors. One valuable resource the SCCDRC can provide the Spokane community is an opportunity to review these circumstances and their outcomes as they repeatedly arise.

Deaths in Spokane County related to trauma, neglect, homicide, and suicide represent a significant portion of potentially preventable child mortality. Unintentional injuries remain the most frequent manner of preventable, traumatic child death with motor vehicle and drowning accidents remaining important preventable causes of child deaths. In this report toxic ingestions were more frequent than has been previously reported. The number of Sudden Infant Death Syndrome (SIDS) deaths, which are not categorized as preventable by Spokane County Child Death Review Committee (SCCDRC) criteria, appears to be slightly fewer than previous levels, as has happened statewide and nationwide in conjunction with national campaigns addressing infant sleep position and bedding materials.

Spokane Regional Health District continues to promote public health education on the topics of infant sleep position, waterbed and soft bedding suffocation risk, suicide, and drowning prevention. In 2002, the Spokane Child Death Prevention Action Team created an innovative public information campaign addressing SIDS and safe sleep practices. By disseminating the information included in this report and future reports, SCCDRC intends to continue motivating and mobilizing professional organizations, service groups, private and public agencies, the business community, and individuals. They all need to be involved in trying to prevent some of these tragic deaths from occurring in the future.

Identifying and preempting preventable deaths in the future requires an adequate evaluation of those that already have occurred. The primary step is an adequate evaluation of the death scene. An autopsy, including appropriate laboratory studies, stands with the death scene evaluation as essential data to categorize many child deaths. Thorough forensic evaluations require the commitment of time and resources, but yield critical information not accessible by any other means. In national assessments and locally, child death review teams repeatedly identify instances in which incomplete information in one or more of these areas made it difficult or impossible to review the death completely. Most frequently, the lapses are records that are incomplete according to guidelines and forms already in place. The most valuable asset for worthwhile child death review would be fully and carefully completed, standard records. Hopefully, the information provided in this text will be useful in gauging the magnitude of the

problem of preventable child deaths and the potential benefit of allocating resources to explore these difficult questions.

Data Sources

While enabling legislation provides the mandate for local child death review, uncertainties remain regarding access to critical information for committees including medical records in cases not referred to the Spokane County Medical Examiner's office. Among the options to provide these records are:

- Legislation to provide access for local child death review committees to any pertinent medical records (as in the approach taken by the Missouri Child Death Review System.)
- Legislation or agreement within the medical community to designate all child deaths as referrals to coroners or medical examiners.
- Legislation to provide access to data in confidential state databases (comparable to that available for academic research purposes) to local child death review committees involved in assessment processes.

Valuable sources of data already collected regularly should be accessible to local child death review committees. The stringent confidentiality requirements for child death review committees are comparable to confidentiality constraints for State data agencies and academic research. For example, the Washington State Department of Health Center for Health Statistics includes in birth certificate records a fairly extensive confidential data set. It contains various socioeconomic, demographic, and maternal health indicators which could provide worthwhile insights for the child death review process. Information and assessment from local review processes is essential to promote effective local community policy and planning. Local communities and the state as a whole would benefit from these data being available for review. Amending current state law to provide such data access would be a substantial step enabling the Washington State Department of Health Child Death Review Program to improve the quality and extent of child death review aggregate data extending across the entire system.

Education

As issues arise in child death review that warrant increased public awareness, the Committee refers them to member agencies to pursue. The preventable deaths in 2000 and 2001 involved motor vehicle accidents without safety restraints, accidental drowning, fires, toxic ingestions of prescription medications, lapses in supervision, and homicides and suicides by firearms. All of these issues reasonably could be addressed in public forums, in media releases, and in assessment and planning documents. For example, one approach used in several US locations to decrease teen motor vehicle deaths is the graduated driver's license. This strategy attempts to shield inexperienced drivers from road conditions they are not yet skilled enough to handle. The gradual conversion of community norms that has made driving while intoxicated widely unacceptable, coupled with strictly enforcing prevention of underage drinking, will also save lives. In this report, suicide deaths involving adolescents with immediate access to loaded

firearms moved the SCCDRC members to consider the deaths preventable. Handgun safety strategies likewise involve influencing community norms for acceptable, responsible parenting. National and international studies concerning the association of SIDS with prone sleep position and soft bedding materials is a promising area in which a simple intervention potentially appears already to have been widely beneficial. These issues all suggest suitable topics for public information. They include:

- Motor vehicle safety restraints for children,
- Safe handling of prescription medications around children,
- Recognizing signs of emotional distress and suicidal intent in children,
- Water safety,
- Fire safety,
- Children's access to firearms,
- Infant sleep position,
- Reporting and intervention in suspected child abuse or neglect.

The primary objective for reviewing child deaths is to make Spokane County a safer place for children to live. Hopefully, as information about issues surrounding child deaths becomes more widely available and visible in the next decade of child death review many sectors of this community will find it as compelling and disturbing as SCCDRC committee members have. Awareness of even a single child dying unnecessarily calls out for improvement, for developing effective means of prevention. This report is an incremental step in providing that knowledge to the professional communities and the general public, to augment the efforts of the many child advocates in this community diligently working toward the same goal.

APPENDIX A - REVISED CODE OF WASHINGTON STATE - RCW 70.05.170

RCW 70.05.170 - Child mortality review
(1)(a) The legislature finds that the mortality rate in Washington State among infants and children less than eighteen years of age is unacceptably high, and that such mortality may be preventable. The legislature further finds that, through the performance of child mortality reviews, preventable causes of child mortality can be identified and addressed, thereby reducing the infant and child mortality in Washington State.
(b) It is the intent of the legislature to encourage the performance of child death reviews by local health departments by providing necessary legal protections to the families of children whose deaths are studied, local health department officials and employees, and health care professionals participating in child mortality review committee activities.
(2) As used in this section, "child mortality review" means a process authorized by a local health department as such department is defined in RCW 70.05.010 for examining factors that contribute to deaths of children less than eighteen years of age. The process may include a systematic review of medical, clinical, and hospital records; home interviews of parents and caretakers of children who have died; analysis of individual case information; and review of this information by a team of professionals in order to identify modifiable medical, socioeconomic, public health, behavioral, administrative, educational, and environmental factors associated with each death.
(3) Local health departments are authorized to conduct child mortality reviews. In conducting such reviews, the following provisions shall apply:
(a) All medical records, reports, and statements procured by, furnished to, or maintained by a local health department pursuant to chapter 70.02 RCW for purposes of a child mortality review are confidential insofar as the identity of an individual child and his or her adoptive or natural parents is concerned. Such records may be used solely by local health departments for the purposes of the review. This section does not prevent a local health department from publishing statistical compilations and reports related to the child mortality review, if such compilations and reports do not identify individual cases and sources of information.
(b) Any records or documents supplied or maintained for the purposes of a child mortality review are not subject to discovery or subpoena in any administrative, civil, or criminal proceeding related to the death of a child reviewed. This provision shall not restrict or limit the discovery or subpoena from a health care provider of records or documents maintained by such health care provider in the ordinary course of business, whether or not such records or documents may have been supplied to a local health department pursuant to this section.
(c) Any summaries or analyses of records, documents, or records of interviews prepared exclusively for purposes of a child mortality review are not subject to discovery, subpoena, or introduction into evidence in any administrative, civil, or criminal proceeding related to the death of a child reviewed.
(d) No local health department official or employee, and no members of technical committees established to perform case reviews of selected child deaths may be examined in any administrative, civil, or criminal proceeding as to the existence or contents of documents assembled, prepared, or maintained for purposes of a child mortality review.
(e) This section shall not be construed to prohibit or restrict any person from reporting suspected child abuse or neglect under chapter 26.44 RCW nor to limit access to or use of any records, documents, information, or testimony in any civil or criminal action arising out of any report made pursuant to chapter 26.44 RCW. [1993 c 41 § 1; 1992 c 179 § 1.]

APPENDIX B1 - CONFIDENTIALITY CONSENT FORMS

SPOKANE COUNTY
CHILD DEATH REVIEW COMMITTEE

CONFIDENTIALITY STATEMENT FOR COMMITTEE MEMBERS

Spokane County Child Death Review Committee (SCCDRC) meetings may consider issues relating to professional practices, specific practitioners, or specific patients. Washington State code provisions protect the confidentiality of records used, case material discussed, and communications between participants. To protect all those involved and to ensure the integrity of SCCDRC proceedings, such confidential information shall not be revealed to or discussed with anyone except a committee member or staff of a member agency with a legitimate professional interest in the proceedings.

As a member of the SCCDRC, I certify that I am trained in the prevention, identification, or treatment of child abuse and neglect cases and/or represent an agency that is involved in those processes. I am aware of the confidentiality policy described above and will not reveal any case-identifying information to anyone other than SCCDRC members and staff members of agencies represented on the SCCDRC. By affirming this confidentiality statement, agency representatives on the SCCDRC affirm that any staff member of their agency with access to SCCDRC proceedings agrees to abide by this confidentiality statement.

Name: (Print): ____

Signature: ____

Agency: ____

Date: ____

FORM: Confidentiality No. 1 Members (Blank)

APPENDIX B2 - CONFIDENTIALITY CONSENT FORMS

SPOKANE COUNTY
CHILD DEATH REVIEW COMMITTEE

CONFIDENTIALITY STATEMENT
FOR VISITORS

Spokane County Child Death Review Committee (SCCDRC) meetings may consider issues relating to professional practices, specific practitioners, or specific patients. Washington state code provisions protect the confidentiality of records used, case material discussed, and communications between participants. To protect all those involved and to ensure the integrity of SCCDRC proceedings, such confidential information shall not be revealed to or discussed with anyone except a committee member or staff of a member agency with a legitimate professional interest in the proceedings.

Periodically, the SCCDRC may solicit information and presentations from consultants in the prevention, identification, or treatment of child abuse and neglect cases, representatives of agencies involved in those processes, or authorities in related fields. As such a consultant, I am aware of the confidentiality policy described above and will not reveal any case-identifying information to anyone other than SCCDRC members.

Name: (Print): ____

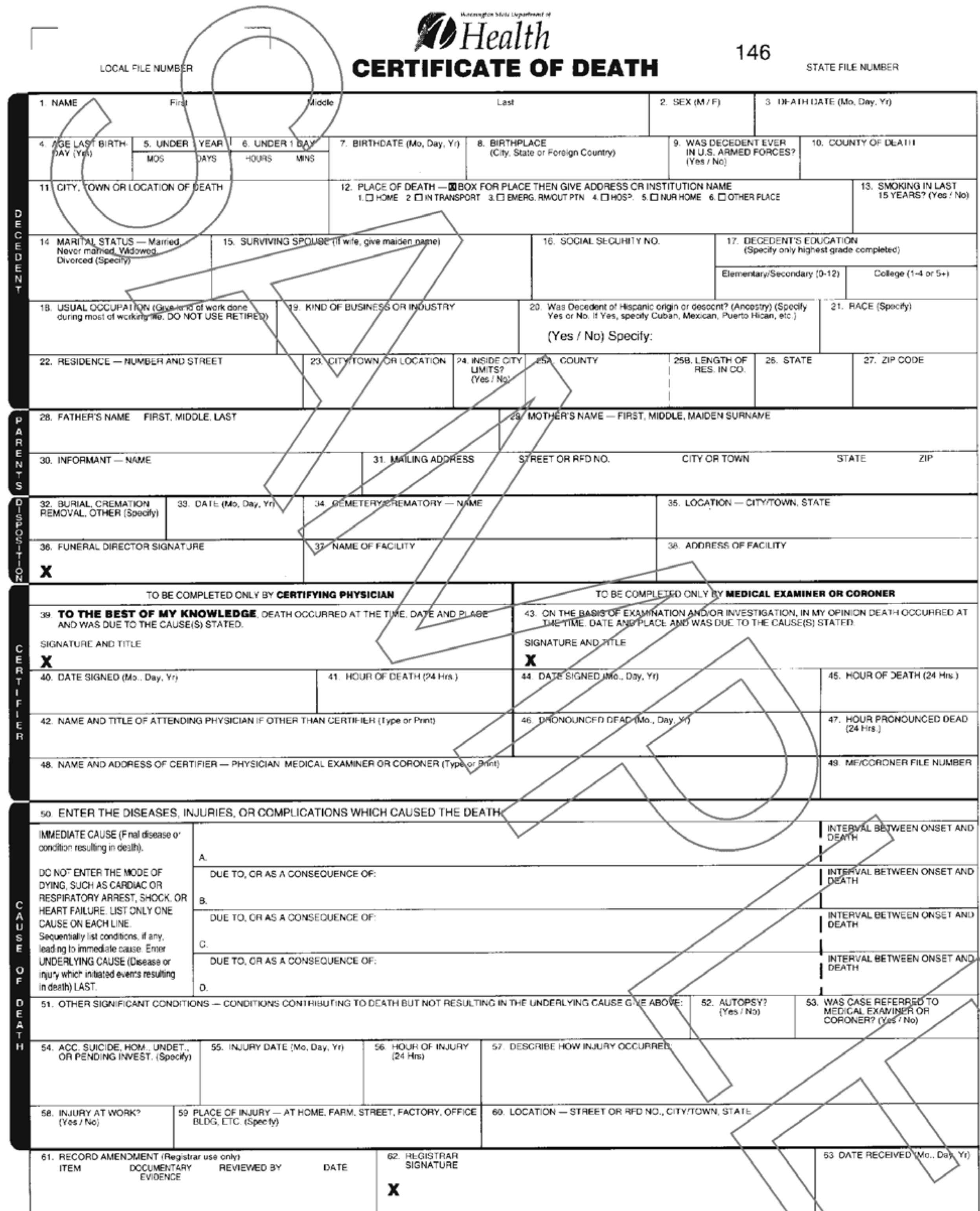
Signature: ____

Agency: ____

Date: ____

FORM: Confidentiality No. 2 Visitors (Blank)

APPENDIX C1 - WASHINGTON STATE DEATH CERTIFICATE



Washington State Department of Health

CERTIFICATE OF DEATH

LOCAL FILE NUMBER

146

STATE FILE NUMBER

DECEDENT

1. NAME First Middle Last
2. SEX (M / F)
3. DEATH DATE (Mo, Day, Yr)
4. AGE LAST BIRTHDAY (Yrs)
5. UNDER 1 YEAR MOS DAYS
6. UNDER 1 DAY HOURS MINS
7. BIRTHDATE (Mo, Day, Yr)
8. BIRTHPLACE (City, State or Foreign Country)
9. WAS DECEDENT EVER IN U.S. ARMED FORCES? (Yes / No)
10. COUNTY OF DEATH
11. CITY, TOWN OR LOCATION OF DEATH
12. PLACE OF DEATH — ☒ BOX FOR PLACE THEN GIVE ADDRESS OR INSTITUTION NAME 1. ☐ HOME 2. ☐ IN TRANSPORT 3. ☐ EMERG. RM/OUT PTN 4. ☐ HOSP. 5. ☐ NUR HOME 6. ☐ OTHER PLACE
13. SMOKING IN LAST 15 YEARS? (Yes / No)
14. MARITAL STATUS — Married, Never married, Widowed, Divorced (Specify)
15. SURVIVING SPOUSE (If wife, give maiden name)
16. SOCIAL SECURITY NO.
17. DECEDENT'S EDUCATION (Specify only highest grade completed) Elementary/Secondary (0-12) College (1-4 or 5+)
18. USUAL OCCUPATION (Give kind of work done during most of working life. DO NOT USE RETIRED)
19. KIND OF BUSINESS OR INDUSTRY
20. Was Decedent of Hispanic origin or descent? (Ancestry) (Specify Yes or No. If Yes, specify Cuban, Mexican, Puerto Rican, etc.) (Yes / No) Specify:
21. RACE (Specify)
22. RESIDENCE — NUMBER AND STREET
23. CITY/TOWN, OR LOCATION
24. INSIDE CITY LIMITS? (Yes / No)
25A. COUNTY
25B. LENGTH OF RES. IN CO.
26. STATE
27. ZIP CODE

PARENTS

28. FATHER'S NAME FIRST, MIDDLE, LAST
29. MOTHER'S NAME — FIRST, MIDDLE, MAIDEN SURNAME
30. INFORMANT — NAME
31. MAILING ADDRESS STREET OR RFD NO. CITY OR TOWN STATE ZIP

DISPOSITION

32. BURIAL, CREMATION REMOVAL, OTHER (Specify)
33. DATE (Mo, Day, Yr)
34. CEMETERY/CREMATORY — NAME
35. LOCATION — CITY/TOWN, STATE
36. FUNERAL DIRECTOR SIGNATURE X
37. NAME OF FACILITY
38. ADDRESS OF FACILITY

CERTIFIER

TO BE COMPLETED ONLY BY **CERTIFYING PHYSICIAN**

39. **TO THE BEST OF MY KNOWLEDGE**, DEATH OCCURRED AT THE TIME, DATE AND PLACE AND WAS DUE TO THE CAUSE(S) STATED. SIGNATURE AND TITLE X
40. DATE SIGNED (Mo., Day, Yr)
41. HOUR OF DEATH (24 Hrs.)
42. NAME AND TITLE OF ATTENDING PHYSICIAN IF OTHER THAN CERTIFIER (Type or Print)

TO BE COMPLETED ONLY BY **MEDICAL EXAMINER OR CORONER**

43. ON THE BASIS OF EXAMINATION AND/OR INVESTIGATION, IN MY OPINION DEATH OCCURRED AT THE TIME, DATE AND PLACE AND WAS DUE TO THE CAUSE(S) STATED. SIGNATURE AND TITLE X
44. DATE SIGNED (Mo., Day, Yr)
45. HOUR OF DEATH (24 Hrs.)
46. PRONOUNCED DEAD (Mo., Day, Yr)
47. HOUR PRONOUNCED DEAD (24 Hrs.)
48. NAME AND ADDRESS OF CERTIFIER — PHYSICIAN, MEDICAL EXAMINER OR CORONER (Type or Print)
49. ME/CORONER FILE NUMBER

CAUSE OF DEATH

50. ENTER THE DISEASES, INJURIES, OR COMPLICATIONS WHICH CAUSED THE DEATH.

IMMEDIATE CAUSE (Final disease or condition resulting in death).

DO NOT ENTER THE MODE OF DYING, SUCH AS CARDIAC OR RESPIRATORY ARREST, SHOCK, OR HEART FAILURE. LIST ONLY ONE CAUSE ON EACH LINE. Sequentially list conditions, if any, leading to immediate cause. Enter UNDERLYING CAUSE (Disease or injury which initiated events resulting in death) LAST.

A. — INTERVAL BETWEEN ONSET AND DEATH
B. DUE TO, OR AS A CONSEQUENCE OF: — INTERVAL BETWEEN ONSET AND DEATH
C. DUE TO, OR AS A CONSEQUENCE OF: — INTERVAL BETWEEN ONSET AND DEATH
D. DUE TO, OR AS A CONSEQUENCE OF: — INTERVAL BETWEEN ONSET AND DEATH

51. OTHER SIGNIFICANT CONDITIONS — CONDITIONS CONTRIBUTING TO DEATH BUT NOT RESULTING IN THE UNDERLYING CAUSE GIVE ABOVE:
52. AUTOPSY? (Yes / No)
53. WAS CASE REFERRED TO MEDICAL EXAMINER OR CORONER? (Yes / No)
54. ACC, SUICIDE, HOM., UNDET., OR PENDING INVEST. (Specify)
55. INJURY DATE (Mo, Day, Yr)
56. HOUR OF INJURY (24 Hrs)
57. DESCRIBE HOW INJURY OCCURRED
58. INJURY AT WORK? (Yes / No)
59. PLACE OF INJURY — AT HOME, FARM, STREET, FACTORY, OFFICE BLDG, ETC. (Specify)
60. LOCATION — STREET OR RFD NO., CITY/TOWN, STATE

61. RECORD AMENDMENT (Registrar use only) ITEM DOCUMENTARY EVIDENCE REVIEWED BY DATE
62. REGISTRAR SIGNATURE X
63. DATE RECEIVED (Mo., Day, Yr)

FOR INSTRUCTIONS SEE BACK AND HANDBOOK

DOH 110-008 (Rev. 7/91) (formerly DSHS 9-150)

Executive Summary

The Spokane County Child Death Review Committee (SCCDRC), a multi-agency, multidisciplinary team, has examined problems surrounding local deaths of children since 1991. At the same time, many federal and State health, criminal justice, and social services agencies, including some in Washington State, have demonstrated increasing interest in the causes of child deaths. In 1994, the SCCDRC began reviewing all deaths of children less than 18 years of age occurring in Spokane County and systematically collecting data about them. This process is sanctioned by Washington State law codified in RCW 70.05.170, which also assures full confidentiality of all Committee proceedings.

The Committee currently uses a data system developed by Washington State Department of Health Child Death Review Program (DOH CDRP) to record the deceased children's causes of death, manner of death, the adequacy and accuracy of assembled data, whether the death was preventable by means of intervention available within the community, and other relevant data. The Committee specifically examines whether deaths involved unintentional injury, intentional injury, or maltreatment.

For the 2000-2001 activities report, the Committee considered 94 child deaths among residents of Spokane County. Of these deaths, 27 were considered preventable, 17 of indeterminate preventability, and 50 not preventable. The preventable deaths included five homicides, three suicides, 17 unintentional injury deaths, and two natural deaths. The 18 unintentional injury deaths included six motor vehicle accidents, two accidental drownings, one traumatic boating crash, three fire-related deaths, one death by positional asphyxia, one accidental ligature asphyxia, three accidental toxic ingestions of prescription narcotics, and one case of anaphylaxis precipitated by food allergy. Drowning deaths occurred at a river and a supervised pool site. Lack of seat belt use, excessive speed, and alcohol were identified risk factors in one motor vehicle death. Five homicides were reported including two adolescent firearm deaths, two stabbing deaths, and a motor vehicular homicide of an adolescent passenger. Of the three suicides in 2000 and 2001, two were by self-inflicted gunshot wounds and one was asphyxia by hanging. Because apparent means of prevention were not used in these cases, the suicides are categorized as preventable deaths in this report. Of the four firearm deaths listed as suicides or homicides, two were from unsecured, loaded firearms accessible in the home.

The report includes data from Spokane newborn intensive care facilities regarding neonatal deaths, including: maternal age, gestational age, birth weight, and other factors. Of the eight SIDS deaths reported, four were younger than four months old. Associated conditions with SIDS were: antecedent respiratory infection, prematurity or perinatal medical difficulties, soft bedding or waterbed, and prone sleep position.

The report describes the need for improved forensic data collection in death inquiries, particularly the need for standardized, thorough death scene investigations. It mentions a 1996 Centers for Disease Control publication of guidelines for infant death scene investigations. It discusses the inclusion of the SCCDRC within the DOH CDRP. Using software DOH provides, local teams submit data to the DOH CDRP System for description, analysis, and de-identified aggregation into reports about child deaths in Washington State.

This report mentions the recommendation from the American Academy of Pediatrics and various federal agencies to avoid soft, fluffy bedding or prone sleep position for normal infants. It discusses measures to improve and extend access to useful data. Finally, it lists several public health education measures which could mitigate some of the child deaths occurring in Spokane County addressing motor vehicle safety restraints for children, safe handling of prescription drugs, recognition of emotional distress and suicidal intent in children, water safety, children's access to firearms, and infant sleep position.

For further information regarding this report and child death review procedures in Spokane County, please contact:

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