

**Supplemental Report
To the
Governor and General Assembly**

Iowa Child Death Review Team

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**Iowa Child Death Review Team
Supplemental Report to
December 2005 Annual Report**

The Iowa Child Death Review Team (CDRT) is required by law to publish an annual report to the governor and general assembly. Several recommendations that require legislative action are made in each year's annual report. In addition, the team describes areas where state agencies might revise their procedures and policies to ensure that each Iowa child will have a better chance of living a long and healthy life. Suggestions of ways to prevent child deaths are made to the public, including health-care and child-care providers.

The CDRT is currently reviewing child deaths that occurred during calendar year 2005. After reviewing the first 16 cases of Sudden and Unexpected Infant Death (SUID), the team became extremely concerned about the number of infant deaths occurring in a bed-sharing situation. Not only is there danger from accidental overlying when an infant sleeps with an adult or other child; the adult sleep surface and bed coverings offer a prime venue for rebreathing, or suffocation.

In past years, the cause of death for infants dying while bed sharing was almost always called Sudden Infant Death Syndrome (SIDS) by the team. However, SIDS experts and pathologists across the nation have been struggling with new classification schemes for SUID for the past few years. The chair of the Iowa CDRT appointed an ad hoc committee to develop a classification scheme to more consistently call Iowa's SUID cases SIDS, accidental death due to overlying, wedging or positional asphyxia, or undetermined cause.

The group agreed that sudden unexplained infant deaths should be carefully evaluated based primarily on the autopsy results and the death scene investigation. The infants in these three groups can range in age from birth to 1 year. If the autopsy indicates no pathologic process, careful review of death scene investigation information including medical history should help clarify the circumstances surrounding the infant's sudden death. If the child was bed sharing at the time of death, and the patterns of lividity and/or death scene information indicate probable overlying, the manner of death would be classified as "Accident" and the cause of death as "Overlying."

If the death scene information indicates the child was not bed sharing or wedged, the manner of death would be "Undetermined" and the cause of death would be "SIDS." If the child was bed sharing, but the death scene investigation and autopsy were inconclusive, the manner of death would be classified as "Undetermined" and the cause of death would also be "Undetermined."

In analyzing infant deaths occurring in the sleep environment, all three categories of SUID must be evaluated separately and as a group. The risk factor tables on page 5 handle the data in this way.

Of the initial 16 SUID cases for 2005 reviewed by CDRT members and liaisons, 12 cases (75%) involved infants bed sharing at the time of death. In October 2004, the team published its first supplemental report highlighting the its concern about an increasing trend toward bed sharing. Data from 1999 cases showed that 27.1 percent of sudden unexplained deaths involved infants sharing a bed with one or more persons. By 2002 the figure had increased to 45.9 percent.

**Bed Sharing Deaths
For
2005 SUID Cases**

Bed Sharing	Yes	No	Total
Undetermined	10	0	10
SIDS	0	4	4
Accidental	2	0	2
Total	12	4	16

Of the 16 SUID cases reviewed so far, four were classified by the team as SIDS. Two were determined to be accidental deaths, one from positional asphyxia and one from wedging between a single adult bed and the wall. Ten cases were called “Undetermined,” since each infant was bed sharing, and the team could not determine weather the death was a SIDS type death or may have been caused by overlying.

Tobacco exposure increases the risks for SUID. Fourteen of the infants (87.5%) were exposed to second hand smoke after birth, while 12 (75%) had mothers who smoked while pregnant. Several studies have shown that sleeping with a smoker greatly increases the chances of SUID. The relationship is dose–response dependent; that is, if the infant is exposed one to two hours per day to tobacco smoke, chances of infant death doubles. If an infant is exposed to tobacco smoke for more than eight hours per day, the infant’s risk of death is more than nine times that of an infant not exposed to second hand smoke.

The team was startled to find that in 75 percent of the 2005 SUID cases the mother had a history of THC, alcohol, or sleep medication use. THC or “pot” had been used by 10 of the 16 mothers in the past. In fact, in one home THC butts were found at the death scene. One mother used alcohol heavily during her pregnancy. And one mother was using psychotropic and sleep medications to treat depression, anxiety, and a sleep disorder at the time the child died. The question arises whether these drugs hamper the parent’s ability to decide on the appropriate sleep environment for an infant, or make them too groggy to wake up

if they roll near, or perhaps on top of, the sleeping baby. Then too, the use of drugs prior to or during pregnancy may cause these infants to be more vulnerable to SUID. Except for two cases, the death scene investigations were unclear as to whether any of the mothers continued to use drugs at the time of the infants' deaths.

The CDRT has long recommended mandatory substance abuse testing of care providers at the time of any child's death. Such testing would provide more complete information about substance abuse related to SUID and other types of child deaths.

The large number of SUID cases occurring during 2005 in bed sharing situations, makes it more important than ever for health professionals, public health officials, and parent educators to emphasize the appropriate sleep environment for infants. Parents need to adhere to these guidelines at all times, even during naps. They should never sleep with their baby or allow anyone else to do so.

Loose bedding such as adult or infant sized blankets, quilts, or pillows, should be kept out of the sleeping environment. In addition to the danger of rollover, the adult bed contains a large amount of bedding that poses a danger to the sleeping infant. It becomes an ideal environment for rebreathing or suffocation. It may also overheat the baby; overheating is another risk factor for SUID. Room temperature for sleep should be kept at slightly below 70 degrees. Inappropriate bedding was present in nearly all of the bed sharing situations, and in two non-bed sharing situations.

Other risk factors for SIDS include prenatal smoking, secondhand smoke exposure after birth, inappropriate sleep surface, and most especially, prone or side sleeping positions. **However, bed sharing is becoming an enormous risk factor, as shown by the CDRT data for 2005 and past years.**

With this in mind, the Iowa Child Death Review Team urges all health professionals, parent educators, and anyone else who comes in contact with parents, grandparents, childcare providers, and others who care for infants to emphasize a safe sleep environment.

The CDRT urges the Iowa Department of Public Health to spearhead a media campaign by issuing an immediate alert to health professionals, parents, and the public about the dangers of bed sharing, whether the reason for doing so is convenience, comfort, or ease of breast feeding.

**Frequency Distributions of Risk Factors
For
2005 SUID Cases**

**Prenatal Smoking
2005 SUID Cases**

Cause of Death	Yes	No	Total
Undetermined	8	2	10
SIDS	2	2	4
Accidental	2	0	2
Total	12	4	16

**Sleeping Surface at
Time of Death**

Surface	Undet.	SIDS	Accident	Total
Crib	0	1	0	1
Bassinet	0	1	0	1
Bouncy Seat	0	1	0	1
Adult Bed	7	0	2	9
Water Bed	1	0	0	1
Sofa	2	0	0	2
Playpen	0	1	0	1
Total	10	4	2	16

**Secondhand Tobacco Exposure
2005 SUID Cases**

Cause of Death	Yes	No	Total
Undetermined	9	1	10
SIDS	3	1	4
Accidental	2	0	2
Total	14	2	16

**Maternal Drug/Alcohol Use History
2005 SUID Cases**

Cause of Death	Yes	No	Total
Undetermined	8	2	10
SIDS	1	3	4
Accidental	1	1	2
Total	10	6	16

**Bedding Appropriate
2005 SUID Cases**

Cause of Death	Yes	No	Un-known	Total
Undetermined	0	9	1	10
SIDS	0	2	2	4
Accidental	0	2	0	2
Total	0	13	3	16

**Position Found
2005 SUID Cases**

Cause of Death	Prone	Side	Back	Total
Undetermined	6	0	4	10
SIDS	1	1	2	4
Accidental	1	1	0	2
Total	8	2	6	16

**Proper Room Temperature
2005 SUID Cases**

Cause of Death	Yes	No	Un-known	Total
Undetermined	0	5	5	10
SIDS	0	2	2	4
Accidental	0	0	2	2
Total	0	7	9	16