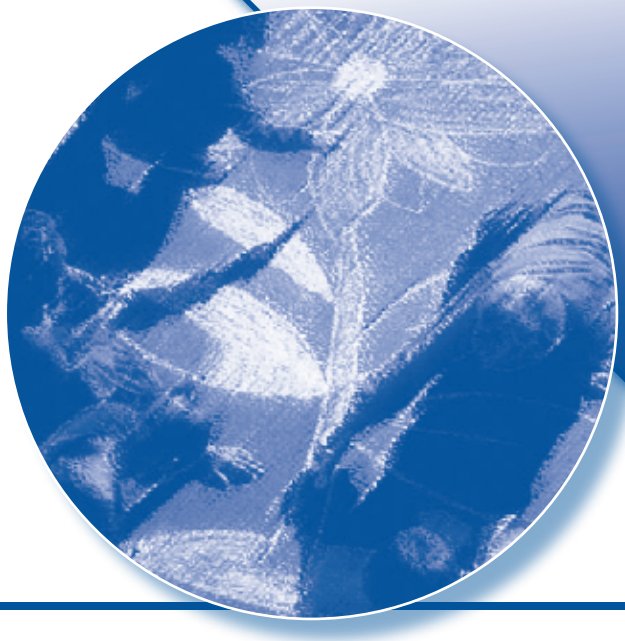
Child Deaths IN MICHIGAN 2005

Michigan Child Death
State Advisory Team
Fifth Annual
Executive Report

A Report on Reviews conducted in 2002 and 2003

An executive report on the causes and trends of child deaths in Michigan based on findings from community-based Child Death Review Teams. With recomendations for policy and practice to prevent child deaths.



The Michigan Department of Human Services
Michigan Public Health Institute

STATE OF MICHIGAN
DEPARTMENT OF HUMAN SERVICES
LANSING

JENNIFER M. GRANHOLM
GOVERNOR

MARIANNE UDOW
DIRECTOR

Summer, 2005

The Honorable Jennifer Granholm, Governor
Honorable Members of the Michigan Legislature

I am submitting this fifth annual report of child deaths in Michigan, in accordance with Public Act 167 of 1997. This report encompasses two years of data. In 2002 and 2003, nearly 1,200 community representatives in 69 counties met to conduct comprehensive reviews of 1,727 deaths. This report presents the findings from these review meetings. It also highlights trends in deaths to Michigan infants and children from 1990-2003.

In 2002 and 2003, 3,654 children ages 0-18 died in Michigan. While the numbers are significantly lower than in prior decades, the Michigan Child Death State Advisory Team believes that more than half of these deaths were preventable. They could have been prevented through various actions by parents or other caregivers, less risky behaviors by adolescents and/or earlier intervention taken by public support systems.

In addition to the large number of preventable child deaths, wide disparities in race and income persist. Black children died at a rate 2.1 times that of white children in 2003. This rate is even higher in deaths due to perinatal conditions, SIDS, fires, firearms and child abuse. Poor children are most often the victims.

Reducing preventable child deaths will require a combination of increased:
- education and information;
- community support structures; and,
- clarification and strengthening of certain laws and/or regulatory structures.

The Michigan Child Death State Advisory Team presents recommendations in this report based on their study of local review findings. These recommendations can improve the systems in our state that are designed to keep children healthy and protected. Many of these recommendations will require a long-term commitment to children, and funding that may not be possible until our state budget picture improves. As we continue our work, we hope this report furthers the awareness and action of state and local officials as well as the citizens of Michigan on how we can all work together to *keep kids alive*.

Thank you for your continued support in working to make Michigan a safe and healthy place for children.

Respectfully Submitted,

Marianne Udow

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ACKNOWLEDGEMENTS

We wish to acknowledge the dedication of the nearly twelve hundred volunteers from throughout Michigan who serve our state and the children of Michigan by serving on Child Death Review Teams. It is an act of courage to acknowledge that the death of a child is a community problem. Their willingness to step outside of their traditional professional roles, and examine all of the circumstances that lead to child deaths, and to seriously consider ways to prevent other deaths, has made this report possible.

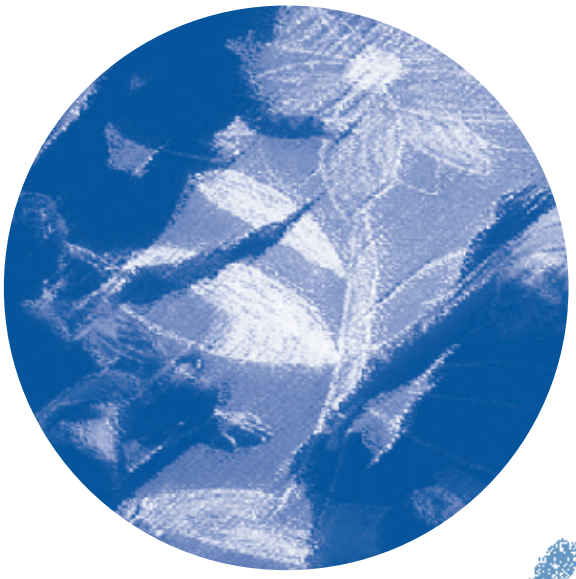
Many thanks to the local Child Death Review Team Coordinators, for volunteering their time to organize, facilitate and report on the findings of their reviews. Because of their commitment to the child death review process, this annual report is published.

The Michigan Department of Community Health, Office of the State Registrar, Division for Vital Records and Health Statistics has been especially helpful in providing the child mortality data and in helping us to better understand and interpret the statistics on child deaths.

The Michigan Department of Human Services provides the funding and oversight for the Child Death Review program, which is managed by contract with the Michigan Public Health Institute.

This report is also available at **www.michigan.gov/dhs** and **www.keepingkidsalive.org**.

Child Deaths IN MICHIGAN



Michigan Child Death State Advisory Team

FIFTH ANNUAL REPORT

Summer 2005

A report on reviews conducted in 2002 and 2003

MISSION

To understand **how** and **why children die** in Michigan,
in order to take **action** to **prevent** other **child deaths**.

Submitted to

The Honorable Jennifer Granholm, Governor, State of Michigan
The Honorable Ken Sikkema, Majority Leader, Michigan State Senate
The Honorable Craig DeRoche, Speaker of the House,
Michigan House of Representatives

Keeping Kids Alive©

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*Funding for these positions supported in whole or in part by the Michigan Department of Community Health, the Centers for Disease Control and Prevention, the Wayne County Health Department, the Detroit Department of Health and Wellness Promotions and/or the U.S. Department of Health and Human Services, Health Resources and Services Administration.

Introduction

Children are not supposed to die. The death of a child is a profound loss not only to the child's parents and family, but also to the larger community. In order to reduce the numbers of these tragic losses, we must first understand how and why our children are dying.

The Child Death Review (CDR) process was implemented in Michigan in 1995 to do just that. CDR brings together a multidisciplinary group of people at the county level to conduct in-depth reviews of child deaths. These reviews identify the adverse factors that led to the death. The reviews motivate communities to take action to eliminate these factors in order to prevent similar tragedies in the future. The review process also aims at improving a community's response to child deaths, including investigations and provision of services to those affected by the death.

The Michigan Child Death State Advisory Team studies county review team findings. The State Team was authorized by Public Act 167 of 1997 to identify and make recommendations on policy and statutory changes pertaining to child fatalities and to guide statewide prevention, education and training efforts (Appendix B lists recommendations from past annual reports on which some type of action has been taken). It is required to publish these annual reports on child fatalities, based on the compilation of death data reported by the state registrar, as well as data received from the county level CDR teams across the state. This fifth annual report is the first to include two year's worth of data. In the years 2002 and 2003, county teams reviewed 1,727 child deaths.

This report is written in memory of all of the children in Michigan who have died. The Michigan Child Death State Advisory Team issues this report with the hope that it will encourage additional efforts, both in local communities and among our state leaders, to keep every child in Michigan safe and healthy.

Michigan Child Mortality Statistics

Child mortality statistics are the official count of the numbers of deaths based on death certificates of children ages 0-18 in Michigan. These statistics are tabulated by the Division for Vital Records and Health Statistics, Office of the State Registrar, at the Michigan Department of Community Health. In 2002, there were 1,823 children who died in Michigan. In 2003, the total was 1,831 children (a rate of 68.2 per 100,000 population). This represents a 32% reduction from 1990, when 2,693 children died (a rate of 103.6 per 100,000 population).

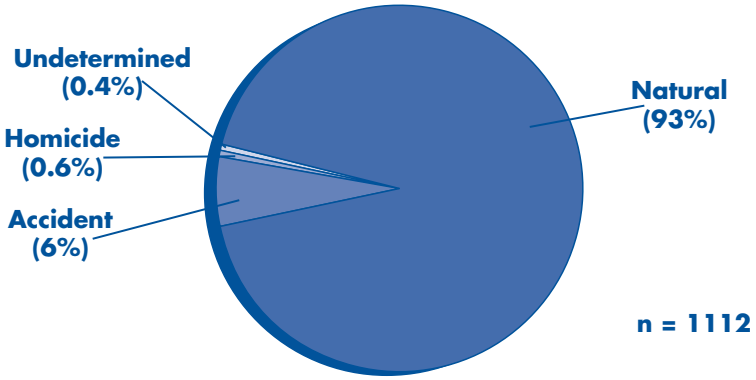
By manner*, natural deaths represented 72% of all deaths, accidents 21%, homicides 4%, suicides 3% and undetermined manner 1%. The leading causes of accidental deaths were motor vehicle related (56%), suffocation (16%), fires (10%) and drowning (10%).

Infant death due to low birth weight, prematurity or other adverse birth-related event is the leading cause** of death for all children, ages 0-18, representing 33% of all child deaths in 2002 and 2003. Other leading causes included congenital anomalies (13%), motor vehicle crashes (12%) and suffocation (5%).

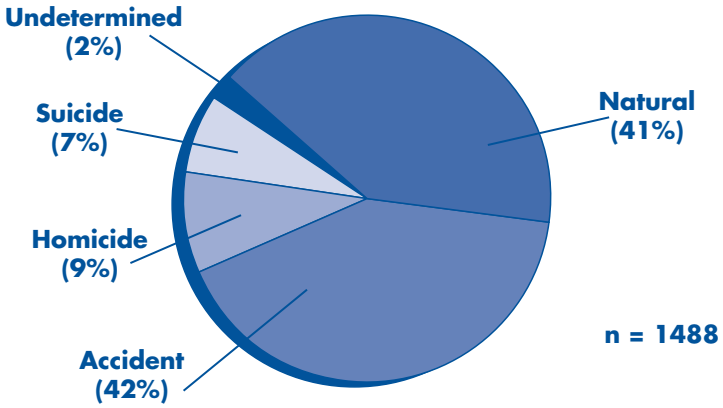
* Manner refers to the circumstances of the death. Within each of the five categories of manner, there can be many different causes of death.
** Cause refers to the actual disease, injury or complications that directly caused the death of the individual.

Overall, for 2002 and 2003, Michigan showed reductions from 2001 in the death rates due to SIDS, firearm accidents and firearm homicides. There were however, increases in the rates of deaths due to motor vehicle crashes, suffocations, fires and drownings. Death rates for non-firearm homicides and suicides remained roughly the same.

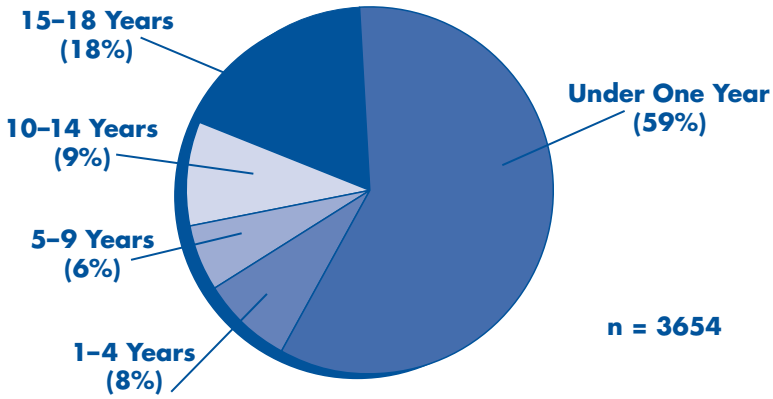
Michigan Infant Deaths by Manner, Ages < 1, 2003



Michigan Child Deaths by Manner, Ages 1–18, 2003



Michigan Child Deaths by Age of Death, Ages 0–18, 2002–2003



Michigan Infant Mortality Statistics

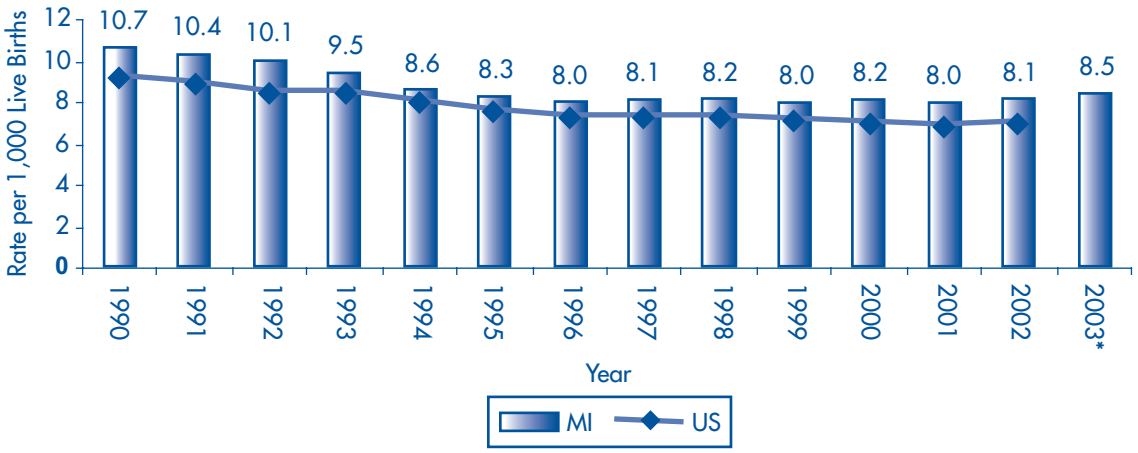
Michigan experienced 1,054 infant deaths in 2002 and 1,112 in 2003. While the birth rate increased one percent between 2002 and 2003, the infant death rate (of 8.5 per 1,000 live births) increased five percent. Still, the infant death rate is 21% less than it was in 1990. Unfortunately, Michigan continues to have higher infant death rates than the national average. The leading causes of infant death in Michigan are perinatal conditions, including low birth weight and prematurity, congenital anomalies, suffocation and Sudden Infant Death Syndrome (SIDS).

The increase in the infant death rate in 2003 is due to an increase in deaths in the neonatal period (first 28 days of life). Of the deaths to infants in 2003, 69% occurred during the neonatal period. The postneonatal death rate (29 to 364 days of age) remained the same from 2002 to 2003.

While the decline in infant mortality since 1990 was similar for black infants (19%) and white infants (15%), substantial racial disparities remain. In 2003, black infants had a death rate 2.6 times that of white infants, which is a larger gap than the disparities that exist for all children aged 0-18 years.

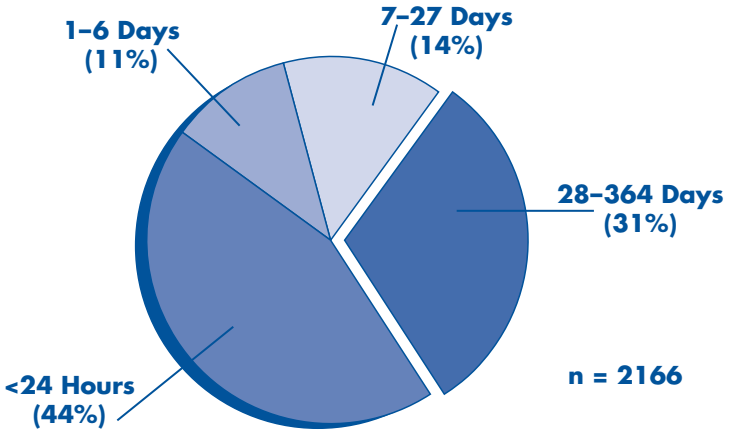
Prematurity and low birth weight continue to be the greatest predictors of infant mortality. Preterm refers to births occurring before the 37th week of pregnancy, and low birth weight infants are those weighing less than 2500 grams or 5 1/2 pounds at birth. While vast improvements have been made in treating these infants, preventing babies from being born too early and too small is still a great challenge.

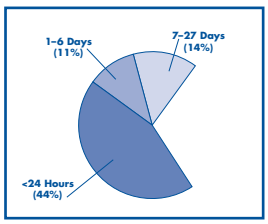
Michigan and United States Infant Death Rates, Ages 0-1, 1990-2003*



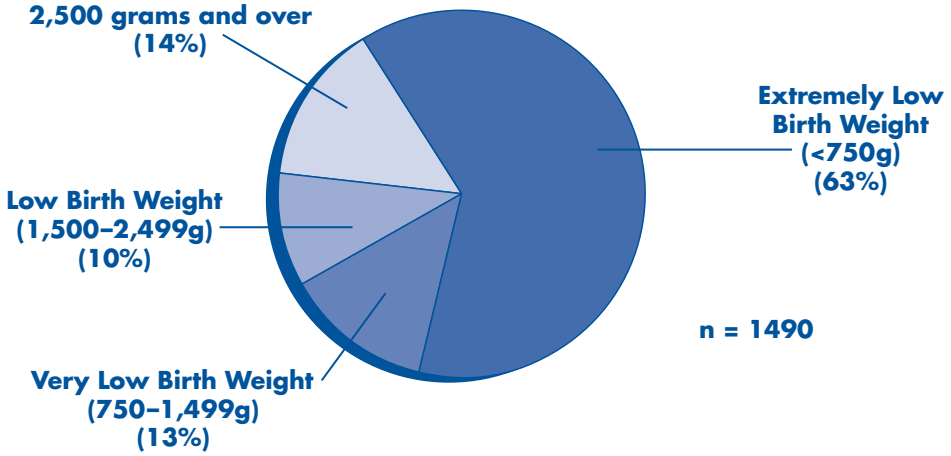
* U.S. infant mortality rates for 2003 are not available.

Michigan Infant Deaths by Age of Death, 2002–2003





Michigan Neonatal Infant Deaths (<28 days) by Birth Weight, 2002–2003



Michigan Child Death Review Statistics

To better understand the child deaths represented by state mortality statistics, nearly 1,200 volunteers from over 20 different disciplines participate in the CDR process at the county level. For 2002 and 2003, they found that had an individual, agency or the community done something differently, over half of the child deaths reviewed (55%) may have been prevented. The teams used their findings to identify and implement changes in local policy, services and programs in order to prevent other deaths, and to better respond to them as a community. Sixty-nine Michigan counties conducted comprehensive reviews of 1,727 child deaths in 2002 and 2003.*

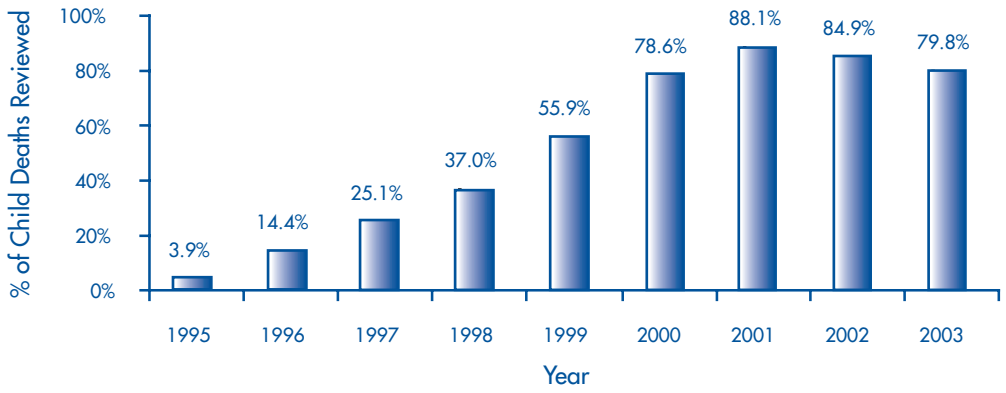
Number of Michigan Child Deaths Reviewed by Year of Review

Year of Review	Number
1995	3
1996	130
1997	201
1998	492
1999	601
2000	807
2001	885
2002	899
2003	828
Total	**4,846**

* Two types of data are used throughout this report. The reader is cautioned not to make a one-to-one comparison between the mortality statistics from death certificates and findings from child death reviews.

Many local teams attempt to review all manners and causes of child deaths. In 2002 and 2003, teams reviewed 765 natural deaths, 636 accidents, 135 homicides, 85 suicides and 106 deaths of undetermined manner. A much higher percentage of unintentional injury and violent deaths have been reviewed than of natural deaths. Since prevention efforts most often focus on injury and violence, it is important to capture details on as many of these types of deaths as possible.

Percent of Non-Natural Child Deaths in Michigan Reviewed by Local CDR Teams*



* Child death reviews conducted in 2004 will contain some deaths that occurred in previous years.

This report summarizes the findings of the local teams and presents recommendations based on those findings to the Governor and the Michigan Legislature. The State Advisory Team recognizes that current state budget limitations may require that some recommendations be implemented in future years, and trusts that future state budget deliberations will consider these proposed enhancements to state services and programs. The following sections describe specific findings and recommendations related to the review process and by cause of death.

The Child Death Review Process

There is no legislative mandate requiring participation in Child Death Review, yet nearly 1,200 volunteers in 69 counties conducted 1,727 reviews of deaths to children in 2002 and 2003. Of the 14 remaining counties that did not conduct reviews in these two years, half had five or less child deaths occur in that time frame.

CDR teams are required by statute to have the following core membership:

- Public Health Department
- Law Enforcement
- Medical Examiner's Office
- Department of Human Services
- County Prosecutor's Office

In addition, most teams have much broader representation, which often include the following:

- Community Mental Health
- Emergency Medical Services
- Schools
- Hospitals and Physicians
- Courts
- Other Community Providers

The teams attempt to review all deaths of children under the age of 19, with the exception of the largest counties in Michigan (Genesee, Ingham, Kent, Macomb, Muskegon, Oakland and Wayne). Because of their high numbers of child deaths, these teams select for review cases that fall under the jurisdiction of the medical examiner. These include sudden and unexpected deaths, accidents, homicides and suicides.

An effective review begins with all participants sharing relevant information from their agencies regarding the circumstances surrounding the child's death. Team members ask for clarification as needed. The team discusses each death, considering the following questions:

- Is the investigation comprehensive and complete?
- Are there services we should be providing?
- What were the risk factors involved in the death?
- Are there agency policies and practices that should be changed?
- What action are we going to take locally to prevent another death?
- Who should take the lead to implement our recommendations?
- What recommendations should we make to the state?

Teams were proactive in translating their findings to action. Teams proposed 618 prevention initiatives and took action to implement 339 of these at the time that they submitted their reports. However, many teams noted that they were unable to implement their initiative ideas due to funding constraints.

Recommendations Regarding the CDR Process

1. The Michigan Legislature: Ensure continued and enhanced resources to support the comprehensive review of Child Death Review (CDR) findings and trends, enhance local prevention efforts and training for CDR team members.

2. The Michigan Department of Community Health: Consider establishment of a state-based regional medical examiner system.

Special Issues in Child Deaths

This annual report presents mortality data and CDR team findings based on cause of death. Most of these causes are fairly easily categorized: motor vehicle crashes, drownings, etc. There are, however, two types of child deaths that currently pose unique challenges. This section highlights the special issues involved in deaths to infants in sleep environments and child abuse and neglect fatalities.

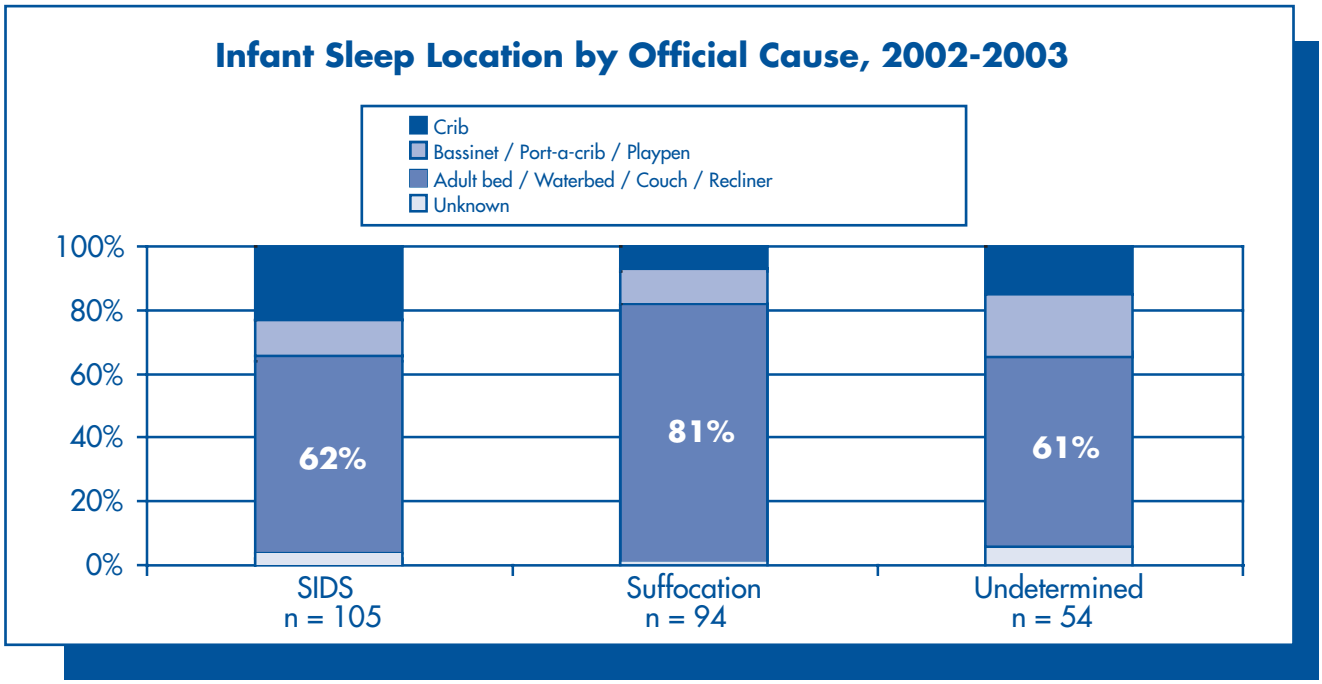
Infant Deaths in Sleep Environments

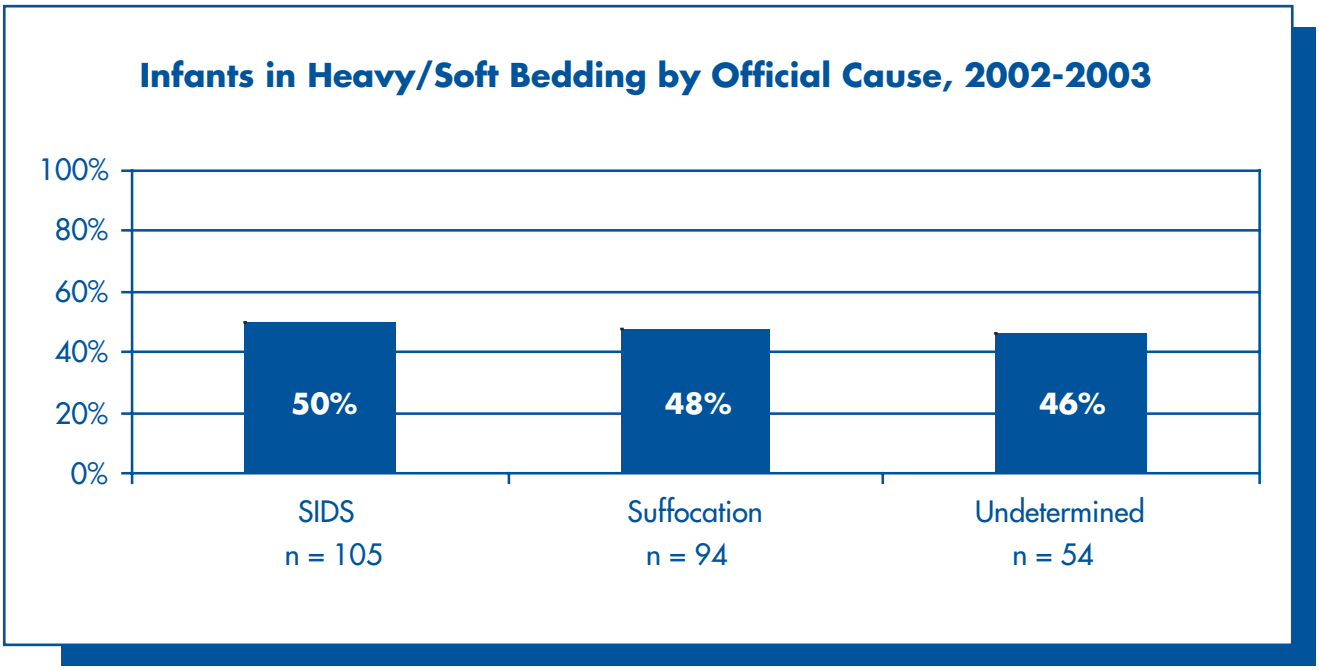
CDR teams reviewed the deaths of 253 infants in 2002 and 2003 that were in a sleep environment at the time of their deaths. A national debate is ongoing in medical, legal and human services circles regarding the diagnoses that are assigned to infants who die suddenly and unexpectedly in sleep situations. The debate relates to how to categorize these deaths when the scene investigation reveals the presence of risk factors such as unsafe infant sleep position and sleep location, unsafe infant bedding and bed-sharing: is the death due to SIDS, accidental suffocation, or should the manner and cause be classified as undetermined?

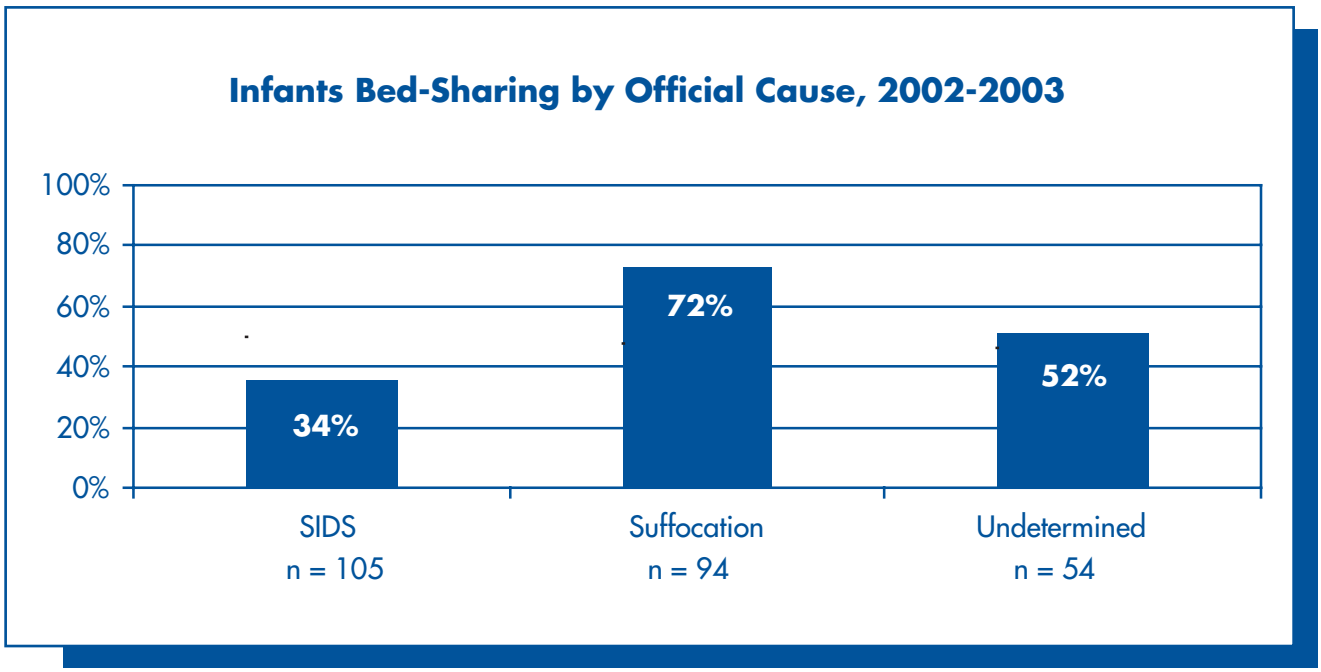
From a prevention perspective, how these deaths should be classified is eclipsed by the fact that these infants share the same or similar risk factors in their sleep environments.

In analyzing the reviews of 105 SIDS deaths, 94 infant suffocations in unsafe sleep environments and 54 infant deaths of undetermined manner (and often cause) that occurred in sleep situations:

- Despite the fact that the Consumer Product Safety Commission (CPSC) recommends that the safest place for a baby to sleep is in a crib, 84% of these 253 infants were not sleeping in cribs at the time of their deaths.
- Contrary to the CPSC's recommendations that parents and caregivers remove pillows, quilts, comforters, sheepskins, stuffed toys and other soft products from the crib and use a sleep sack as an alternative to blankets, 48% of the infants were in heavy or soft bedding at the time of their deaths.
- Over half (52%) were sharing a sleep surface with one or more persons at the time of their deaths.







Since most of the risk factors involved in infant sleeping deaths are easily modifiable, these high numbers of deaths can only be seen as unacceptable, and should serve as a call to action at every level. A state level task force has been studying these issues and is currently in the implementation phase of a statewide safe sleep campaign.

While discussions will no doubt continue regarding the diagnosis of these types of deaths, it is important to recognize the tremendous impact of unsafe sleeping environments. Reducing the numbers of these tragedies will not occur without addressing the risk factors involved.

Under-Counting of Child Abuse and Neglect

In Michigan as well as nationally, the actual number of child abuse and neglect deaths is estimated to be much higher than what is reported by death certificate data. A study published in Pediatrics (2002) estimated that about half of child abuse and neglect deaths are not coded consistently on death certificates. Neglect was identified as the most under-reported form of fatal maltreatment. There are a number of explanations for the under-reporting of fatal child abuse and neglect, including:

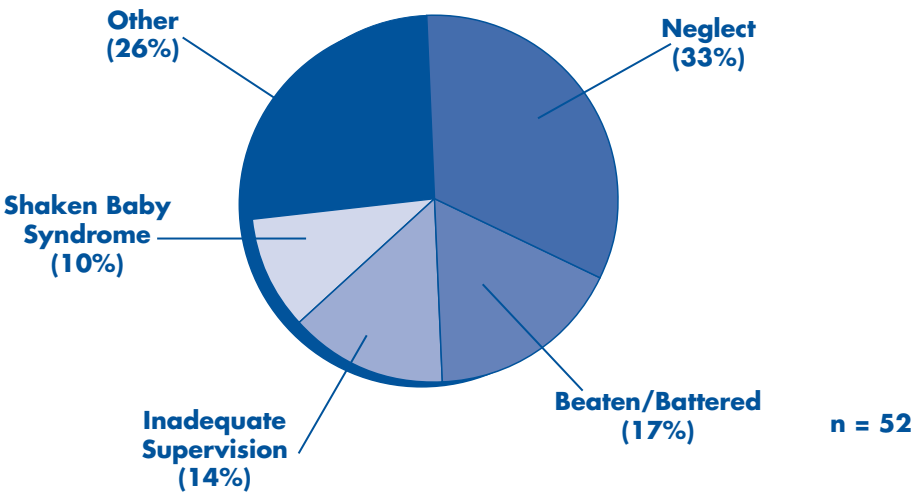
- Physical abuse deaths may be coded as manner homicide, but the cause is not coded specifically as child abuse because the perpetrator is not listed on the death certificate.
- Neglect deaths may be coded as manner natural, for example due to malnutrition, hyperthermia or infectious disease.
- Some deaths may be coded as accidents, even though grossly negligent acts (or failures to act) on the part of caregivers contributed to the death.
- Deaths may have been poorly investigated and the child abuse or neglect went undetected.

In coordination with CDR, Michigan has taken a number of steps to develop a system to better identify all child abuse and neglect deaths. These steps included:

1. *The Michigan Child Maltreatment Surveillance Project*: In 2001, Michigan was one of five states awarded a grant by the Centers for Disease Control and Prevention (CDC) to develop a better method to count fatal child maltreatment. Using data from four different disciplines that collect such information, the project found that:
    - The CDR process identified the largest number of both abuse and neglect deaths, followed by the Michigan Department of Human Services (MDHS) reports.
    - Crime and homicide reports identify most abuse deaths, but no neglect.
    - Death certificates were the least accurate method for determining if abuse or neglect was involved in the fatality.
    - Cases categorized as accidental on the death certificate accounted for over 60% of the neglect deaths identified by the project.
    - An in-depth review of cases from all four sources is the best method to identify all deaths.
    - The rate of maltreatment fatality was higher for children living below 185% of the poverty line.
2. *The MDHS Citizen Review Panel on Child Fatalities*: In 1999, the federally mandated Citizen Review Panel (CRP) on Child Fatalities was formed in Michigan as a sub-committee of the Child Death State Advisory Team. The CRP meets quarterly to thoroughly examine cases of child abuse and neglect. They conduct an in-depth case review of each fatality, and make recommendations in a formal written report to the director of MDHS. It was through the work of the CRP that MDHS was able to identify the total of 52 child maltreatment deaths that it reported to the National Child Abuse and Neglect Data System (NCANDS) for 2002, as opposed to the 12 that were classified as child abuse or neglect on death certificates. Of those 52 deaths:
    - Over half the victims (54%) were under the age of one
    - Black children were over-represented as victims (54%)
    - Neglect was the most frequent cause of death (33%)
    - Mothers were the most frequent category of perpetrator (52%)

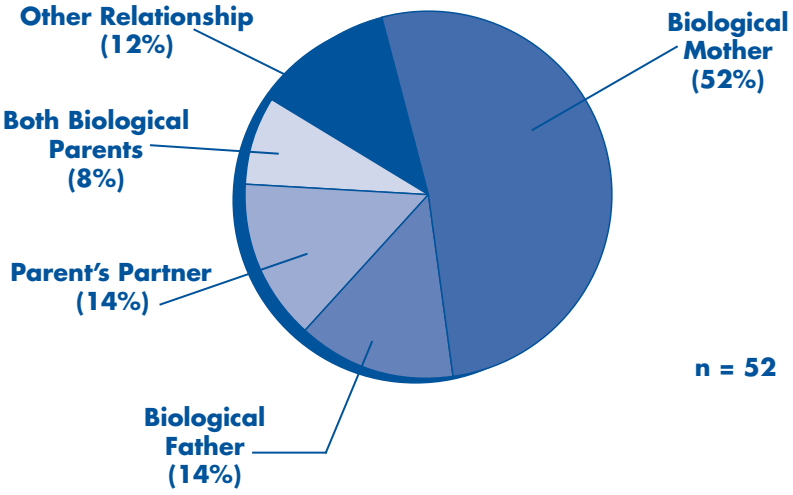
Citizen Review Panel on Child Fatalities

Michigan Child Abuse and Neglect Deaths Identified by Cause of Death, 2002



Citizen Review Panel on Child Fatalities

Michigan Child Abuse and Neglect Deaths Identified by Person Who Inflicted Injury, 2002



3. *Electronic Report of Minor's Death*: In November of 2004, DHS established a policy regarding reporting the deaths of children. These reports notify key DHS administrators of the fatality and the circumstances surrounding it, so that they may ensure that required agency procedures have been initiated. The new Child Death web report was developed to record a child fatality that is reported by county DHS offices for children involved with Children's Protective Services (CPS), Foster Care, Juvenile Justice Foster Care and Adoption. Also, the Office of Child and Adult Licensing (OCAL) is required to report all deaths occurring in DHS-related child care homes, facilities and camps. This report provides MDHS with the capability to correctly identify child maltreatment fatalities in CPS data systems without extensive case reading. It also allows for the analysis of these cases across any data variable available. Over time, as deaths are recorded in this manner, trends will be easier to identify. Furthermore, appropriate analysis of these data trends will assist MDHS in developing prevention initiatives for children and families.

Child Mortality and Death Review Findings for Specific Causes of Death

Natural Infant Deaths Excluding SIDS, Ages 0-1

Key Findings

In 2002 and 2003, there were 1,870 Michigan infants ages 0-1 who died of natural causes, excluding SIDS. This represents a 25% decrease from 1,324 deaths in 1990 to 987 deaths in 2003. However, there is a significant increase from 883 deaths in 2002 to 987 death in 2003. CDR teams reviewed 430 natural infant deaths excluding SIDS in that time period. The medical complexities of these deaths often make it difficult for the teams to review them. However, the specialized Fetal and Infant Mortality Review (FIMR) process, currently existing in 14 Michigan communities, effectively reviews these types of deaths. FIMR findings are discussed in a later section.

Of the 430 cases reviewed, teams found that almost half of the babies died within 48 hours of birth. Prematurity and low birth weight were the most frequent causes.

Cigarette smoking during pregnancy is a major risk factor for low birth weight, intrauterine growth retardation and infant death. In more than 16% of the cases, the mother admitted to smoking during pregnancy.

Recommendations Regarding Natural Infant Deaths Excluding SIDS

1. The Michigan Department of Community Health: Expand and continue technical and financial support to Fetal and Infant Mortality Review Programs in communities with high infant mortality rates and racial disparities.

2. The Michigan Department of Community Health: Promote the Grief and Bereavement services through the SIDS and Other Infant Death Program to medical examiners, hospitals, local public health departments, Fetal and Infant Mortality Review teams and local Child Death Review teams.

3. The Michigan Legislature: Continue to provide Medicaid coverage for family planning services to include all women up to 185% of the poverty level.

4. The Michigan Surgeon General: Work with medical practitioners, medical organizations and insurance companies to ensure:

   a. An increase in the number of providers that discuss pregnancy intendedness at every visit with all females of childbearing age.

b. Providers offer preconception counseling to all females of childbearing age.

c. Adequate numbers of providers that accept Medicaid patients, in reasonable proximity to those patient populations.

d. Early access to and continuity of care for all pregnant females.

e. Compliance with state laws that require physicians to offer pregnant females client-centered counseling and voluntary HIV testing.

f. Screening for all pregnant females and new parents for domestic violence and substance abuse.

g. Redesign of the Maternal Support Services and Infant Support Services programs to:

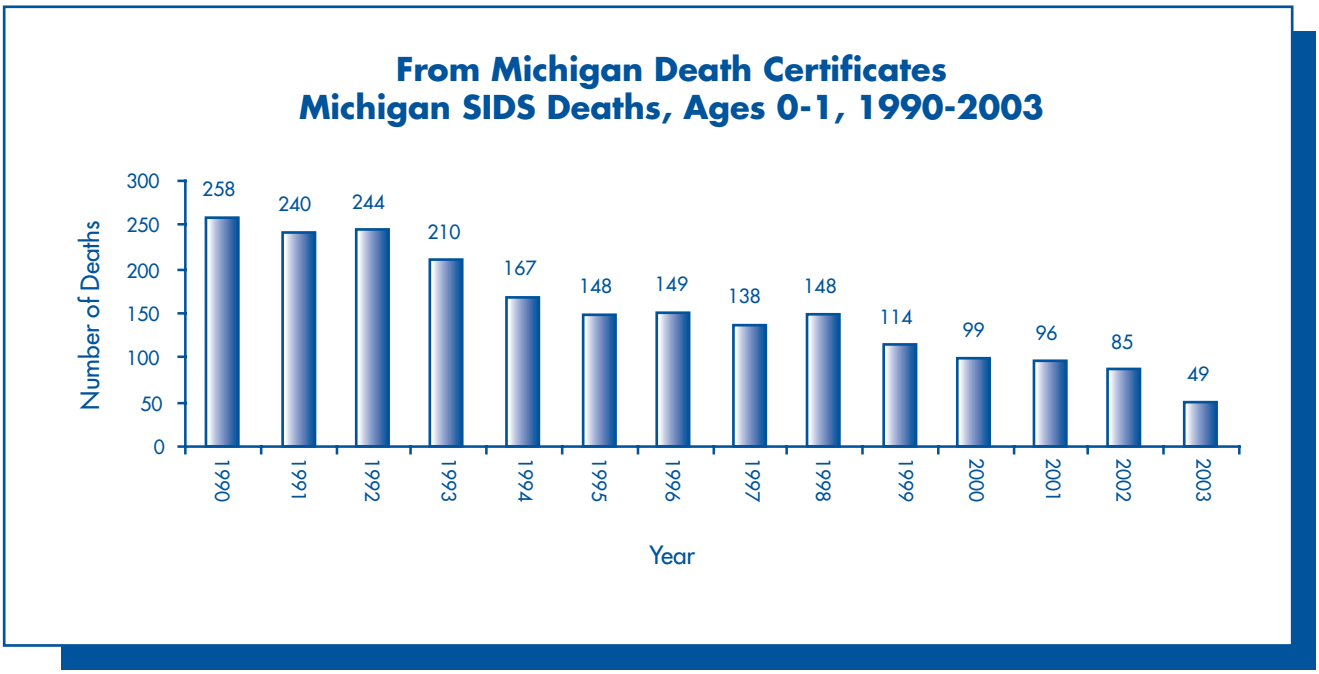
- Improve identification and increase referrals of high risk persons;
- Assure a quality assessment is performed;
- Assure services are designed to specifically reduce risk; and
- Design reimbursement to reinforce the likelihood of improved birth outcomes.

h. Providers offer referrals to smoking cessation services for pregnant and new parents.

Natural - Sudden Infant Death Syndrome

Key Findings

In 2002 and 2003, there were 134 Michigan infant deaths that were attributed to SIDS. This represents an 81% decrease from 258 deaths in 1990 to 49 deaths in 2003. CDR teams reviewed 104 SIDS deaths in 2002 and 2003.



SIDS is defined as the sudden death of an infant under one year of age which remains unexplained after completion of an autopsy, a thorough death scene investigation and a review of the infant's medical history. If

these three criteria are not met, a SIDS diagnosis should not be made. Teams reported that in 96 of the cases, death scene investigations were conducted. In half of the cases, medical records were known to have been reviewed by the medical examiner.

Sixty-three percent of SIDS victims were male and 37% were female. About 89% of these infants died before six months of age.

In only eight of the 104 SIDS deaths reviewed was the baby sleeping in a crib, alone and on his or her back. The other 96 babies were sleeping in unsafe positions or places. Seventy-seven percent of the babies were not sleeping in cribs; 67% of the infants were sleeping on their stomachs or sides and 21% were sharing a bed with other children or adults. In nearly half the cases, the baby was in a sleep environment that contained heavy bedding.

Recommendations Regarding SIDS Deaths

1. The prosecuting attorney, law enforcement agencies, medical examiner and the Department of Human Services in every county: Upon the promulgation of rules by the Michigan Department of Community Health per Public Act 179 of 2004, jointly adopt and implement the child death scene investigation protocols.

2. The Children's Cabinet: Collaborate among member agencies and partner with the Michigan Department of Community Health's SIDS and Other Infant Death Program and Michigan professional associations to implement a statewide campaign promoting safe infant sleep environments consistent with the recommendations of the American Academy of Pediatrics.

3. The Michigan Department of Community Health: Strengthen the prenatal smoking cessation program, especially as it relates to Sudden Infant Death Syndrome.

All Causes of Natural Child Deaths, Ages 1-18

Key Findings

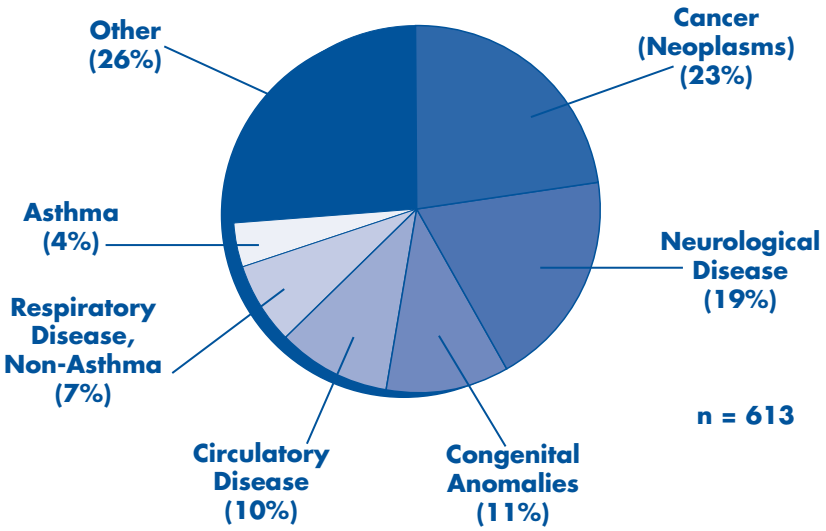
In 2002 and 2003, there were 613 Michigan children over age one who died due to natural causes. This represents a 27% decrease from 397 deaths in 1990 to 289 deaths in 2003. CDR teams reviewed 230 natural deaths to children over age one in 2002 and 2003.

Asthma or other respiratory illness, congenital anomalies, cerebral and cardiac conditions were the top causes of death in this category. Of the 23 asthma deaths reviewed, over half of the children were ages 10-14.

The children (ages 1-18) were receiving Children's Special Health Care Services from their local health department in 43 cases of the 230 cases of child death due to natural causes reviewed (19%).

From Michigan Death Certificates

Michigan Natural Child Deaths 1–18 by Cause of Death, 2002–2003



Recommendation Regarding Natural Deaths to Children Ages 1-18

1. The Michigan Department of Community Health and the Michigan Department of Human Services: Support a partnership and the sharing of information between the Michigan Child Death Review Program and the Michigan Asthma Coalition to improve the diagnosis, treatment and prevention of childhood asthma.

Accidental - Motor Vehicle

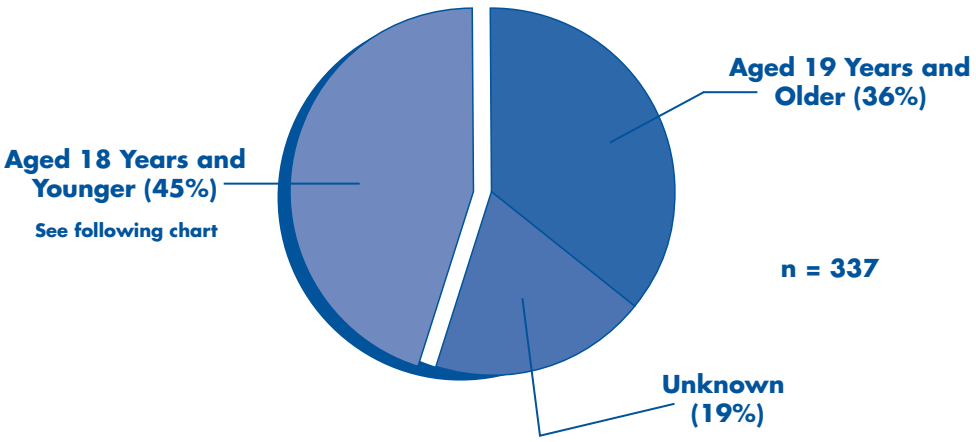
Key Findings

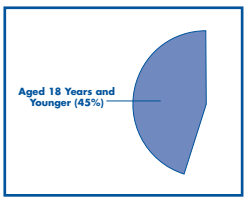
In 2002 and 2003, 432 Michigan children died in motor vehicle crashes. This represents a 21% decrease from 272 deaths in 1990 to 215 deaths in 2003. CDR teams reviewed 337 such deaths in 2002 and 2003.

Teams found that drivers 16-18 years old were nearly three times as likely to be at fault in the fatal crashes reviewed than the next most frequent at-fault age group (22-35).

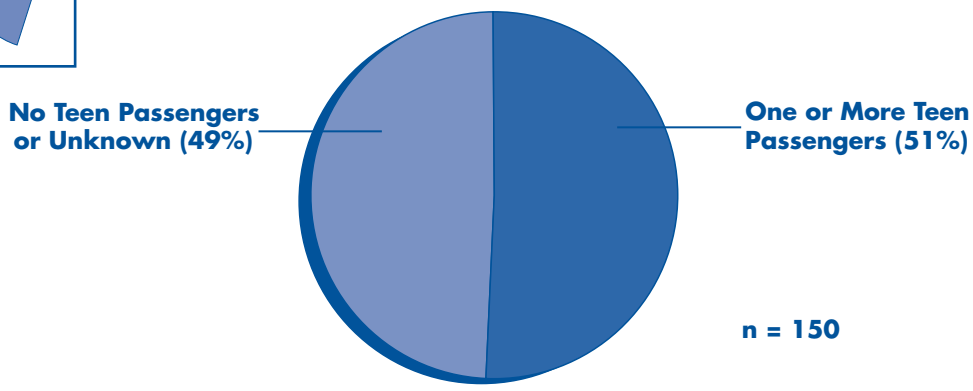
The number of teen passengers in a vehicle at the time of a crash is a major risk factor for young drivers. One or more teen passengers were in the vehicle in half of the fatalities reviewed where the driver at fault was 18 years of age or under.

Accidental Motor Vehicle Child Deaths
Reviewed by Driver at Fault, 2002–2003





Accidental Motor Vehicle Child Deaths
<18 Year Old Driver at Fault
Reviewed by Teen Passengers, 2002–2003



Some teams have identified lack of experience driving in poor weather conditions and on gravel roads as being risk factors for new teen drivers. When weather conditions were noted: for normal road conditions, drivers less than 18 were at fault in 39% of the cases reviewed; in poor weather (ice/snow, wet or foggy), drivers less than 18 were at fault 59% of the time. Even more striking, when the crash occurred on gravel roads, drivers less than 18 were at fault 87% of the time.

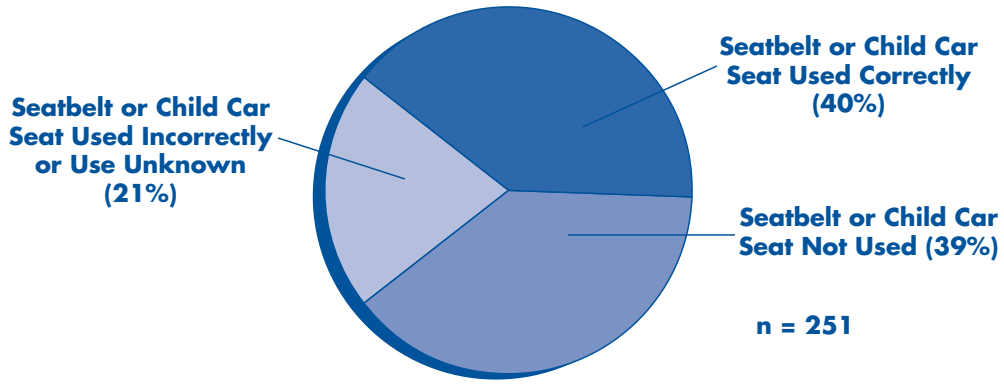
Of the 14 bicycle-related crashes, 13 children were known to have been not wearing a bike helmet at the time, and in the other case, this item was left unanswered.

Children that are killed as pedestrians are not always toddlers and young children who dart out into traffic. Local teams found that the majority of the pedestrian cases reviewed were to kids ages 10 and over (58%).

Eight children were killed in ATV-related crashes. Two deaths were to children between the ages of 12 and 15, where law requires the visual supervision of an adult, but neither was in sight of a supervising adult. Another two deaths were to children under the age of 10, who are not supposed to operate such vehicles.

An appropriate restraint (whether seat belt or child car seat) was used correctly in about 40% of the cases of child deaths in motor vehicle crashes.

Accidental Motor Vehicle Child Deaths Reviewed by Restraint Use, 2002–2003



Recommendations Regarding Motor Vehicle Deaths to Children

1. The Michigan Legislature: Amend the current graduated licensing law to place limits on the number of teen passengers allowed in vehicles driven by teens with Level Two Intermediate Licenses. This limitation should apply at all times of the day, and without an exception allowed for written parental permission.

2. The Michigan Department of State: Partner with the Office of Highway Safety Planning and the Michigan Department of Community Health to conduct a comprehensive review and revision of driver education programs throughout the state to ensure that the curricula adequately address all high-risk driving situations.

3. The Michigan Department of Education: Through the Great Parents, Great Start program, work with Michigan SAFE KIDS to develop a system for distributing child safety seat information to parents, coordinated through the local Intermediate School Districts.

4. The Michigan Legislature: Amend the Michigan Child Passenger law to:

   a. Require the use of booster seats to protect children ages 4-8 and under 4'9";

   b. Increase fines and points for those not following the law; and

   c. Increase public awareness and education programs.

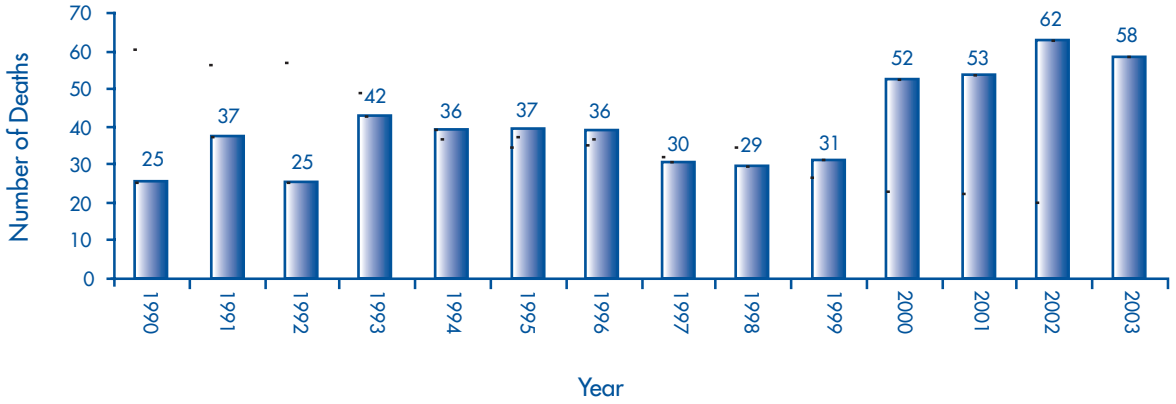
5. The Prosecuting Attorneys Association of Michigan: Educate all law enforcement agencies through their Police Law Bulletin, regarding Public Act 451 of 1994 (MCL 324, sections 81129 and 81130); specifically, regarding the restrictions on children younger than 16 in the operation of all off-road vehicles, and encourage the prosecution of cases wherein this law was violated.

Accidental - Suffocation and Strangulation

Key Findings

In 2002 and 2003, there were 120 Michigan children who died due to accidental suffocation or strangulation. The rate of infant death due to accidental suffocation or strangulation has increased 63% from 18 in 1990 to 49 in 2003. CDR teams reviewed 117 accidental suffocation deaths to children ages 0-18 in 2002 and 2003.

From Michigan Death Certificates
Michigan Child Deaths from Accidental Suffocation, 2002-2003



The vast majority of all suffocation deaths reviewed were to infants less than one year of age (85%).

In 57 of the 117 cases reviewed, the child suffocated when another person rolled over onto them during sleep. Sleeping locations in these incidents were: 39 in adult beds, 10 on couches, three in reclining chairs, two on futons, one on an air mattress and in the other two cases, information about sleeping location was not given.

Twelve of the 15 reviews of children who died when they became wedged between two objects were of infants in sleep environments. Eight of these 12 were placed on adult beds to sleep and subsequently became wedged (e.g., between the mattress and the wall, between the mattress and the headboard, etc.).

Twenty-two cases were reviewed in which infants suffocated in their bedding. Most of these babies (82%) were three months of age or younger.

Recommendations Regarding Suffocation and Strangulation Deaths to Children
[Note: 1 and 2 are the same as in the SIDS section.]

1. The prosecuting attorney, law enforcement agencies, medical examiner and the Department of Human Services in every county: Upon the promulgation of rules by the Michigan Department of Community Health per Public Act 179 of 2004, jointly adopt and implement the child death scene investigation protocols.

2. The Children's Cabinet: Collaborate among member agencies and partner with the Michigan Department of Community Health's SIDS and Other Infant Death Program and Michigan professional associations to implement a statewide campaign promoting safe infant sleep environments consistent with the recommendations of the American Academy of Pediatrics.

3. The Michigan Chapter of the American Academy of Pediatrics: Identify a partner with whom to host a "Train the Trainer" event for pediatricians around the state in order to ensure the dissemination of consistent safe infant sleep messages to parents.

Accidental – Fire and Burn

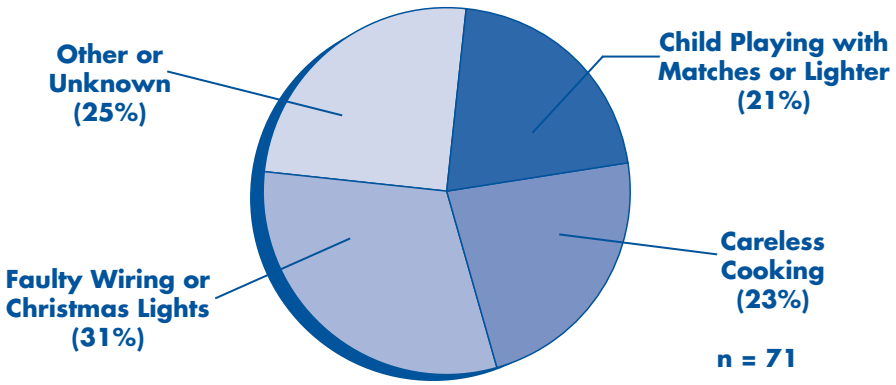
Key Findings

In 2002 and 2003, 75 Michigan children died in accidental fires. The number of fire deaths can vary greatly from year to year, since some fires can involve multiple child victims; the 2003 number is the 5th lowest since 1990. CDR teams reviewed 71 accidental fire deaths in 2002 and 2003. Almost half of the victims were under five years of age.

Local teams determined the socio-economic status of the child fire victims to be "low" in 79% of the cases reviewed.

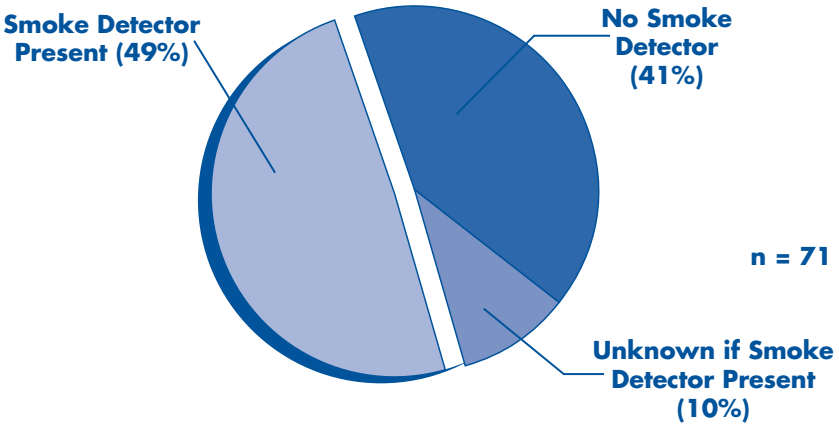
Teams found that children playing with lighters, matches or candles, careless cooking and poor wiring were the top causes of the fires.

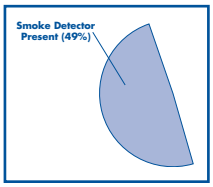
Accidental Fire Child Deaths
Reviewed by Source of Fire, 2002–2003



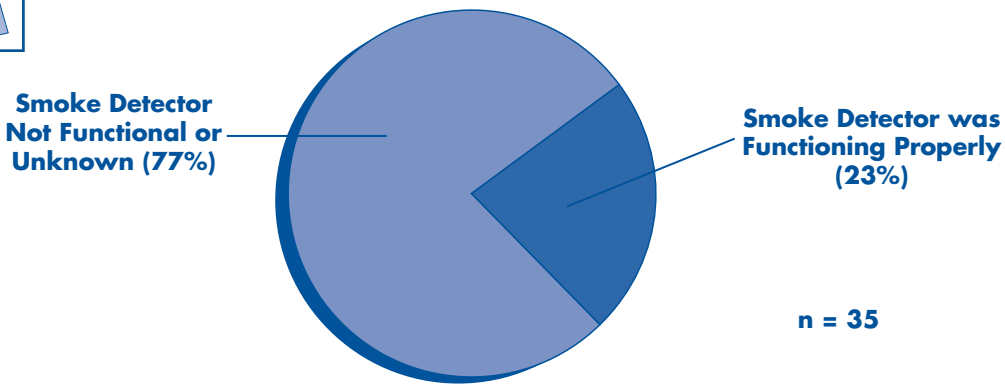
In nearly half the cases (35), it was noted that smoke alarms were present in the home at the time of the fire. However, in only nine cases did the alarms function properly. This was usually because they did not contain working batteries at the time.

Accidental Fire Child Deaths
Reviewed by Smoke Detector Present, 2002–2003





Accidental Fire Child Deaths
Reviewed by Smoke Detector Functional, 2002–2003



When answering whether they believed supervision to have been adequate at the time of the fire, the teams answered "no" or "unsure" in 61% of the fire deaths reviewed.

Recommendations Regarding Fire Deaths to Children

1. The Michigan Department of Community Health, the Michigan State Police and the Michigan Department of Labor and Economic Growth: Campaign to promote local efforts to increase the number of lithium-powered or hard-wired smoke detectors and sprinkler systems in residential dwellings.

2. The Michigan Department of Education and the Michigan Department of Human Services: Ensure that all school districts and child care organizations offer fire safety education for young children, especially in preschool and child care settings.

Accidental - Drowning

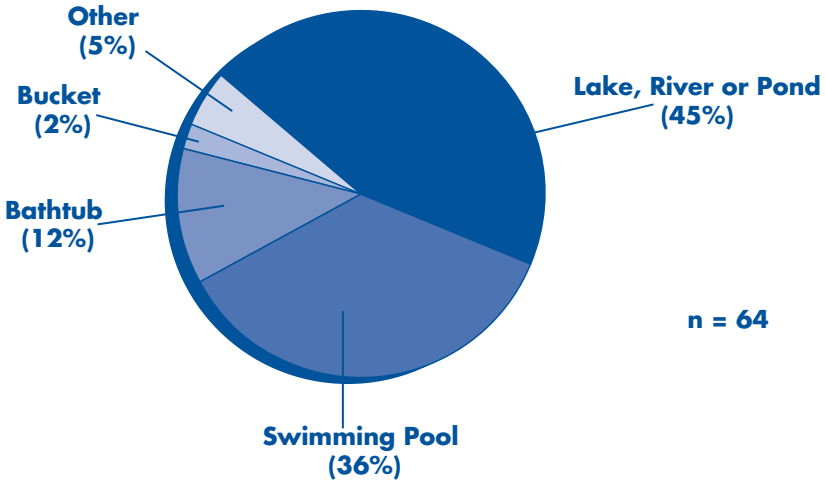
Key Findings

In 2002 and 2003, there were 73 accidental drowning deaths to children. This represents an 18% decrease from 44 deaths in 1990 to 36 deaths in 2003. CDR teams reviewed 64 accidental drowning deaths in 2002 and 2003.

Children ages 1-4 were found to be at increased risk of drowning. But local teams also reported an equally increased drowning risk for youths ages 15-18.

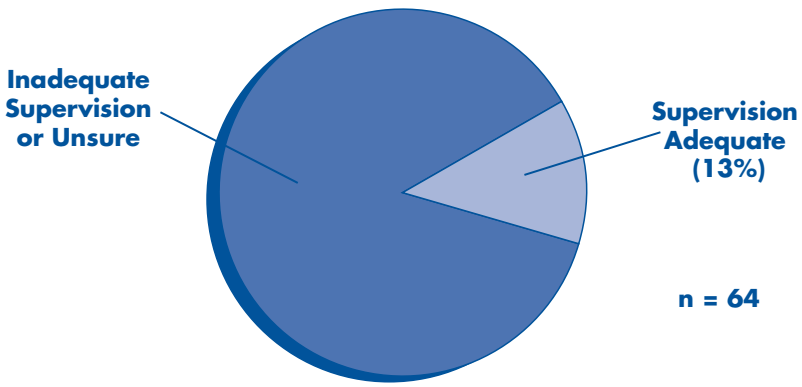
Nine drowning deaths to infants were reviewed. Seven of them were in bathtubs at the time. Over half of the toddlers ages 1-4 drowned in pools and over half of the older children ages 5-18 drowned in open bodies of water (lakes, rivers, ponds, etc.).

Accidental Drowning Child Deaths Reviewed by Location, 2002–2003



Of the 23 child drownings in pools, six children were unattended when they entered the pool area through a gate. Four of these gates were known to have been unlocked at the time. In seven of the 23 cases, the pool was known to have not been completely fenced.

Accidental Drowning Child Deaths Reviewed by Supervision Adequacy, 2002–2003



Recommendations Regarding Child Drownings

1. The Michigan Municipal League, Michigan Association of Counties and Michigan Township Association: Work with communities to enforce the Michigan Construction Codes that require local units of government to adopt and enforce pool-fencing regulations.

2. The Michigan Department of Human Services Office of Children and Adult Licensing: Promulgate child care licensing rules for barriers to pools, hot tubs or open bodies of water at regulated child care facilities.

3. The Department of Natural Resources, Michigan Municipal League, Michigan Association of Counties, Michigan Township Association and Michigan Parks and Recreation Association: Work with local communities to provide adequate signage and appropriate rescue equipment in areas of waterfront and shorelines accessible to the public. Signage should include warnings and appropriate safety precautions.

Accidental – Firearm and Weapon

Key Findings

In 2002 and 2003, there were six accidental firearm deaths to children in Michigan. This represents an 86% decrease from 14 deaths in 1990 to two deaths in 2003. CDR teams reviewed the accidental firearm or other weapon deaths of five children in 2002 and 2003.

The circumstances involved included two hunting incidents, an unintentional self-inflicted wound that resulted from a struggle, a child playing with a firearm found in his home and an unintentional discharge of a weapon due to improper storage. In the last two cases, the firearms were not stored in a locked cabinet and there were no trigger locks on the guns.

In three of the four cases involving minors, teams deemed supervision to have been inadequate at the time of the incidents. All five accidental firearm and weapon deaths were judged to be "definitely" preventable.

Recommendations Regarding Accidental Firearm and Weapon Deaths to Children

1. The Michigan Attorney General's Office: Ensure statewide enforcement of the current laws that require:
   a. Federally licensed firearm dealers to provide, at the point of sale, written materials on gun safety and the proper storage of guns in homes with children; and
   b. Federally licensed firearm dealers are not to sell a firearm in Michigan without a commercially available trigger lock or other device, designed to disable the firearm and prevent it from discharging.

2. The Michigan Legislature: Enact legislation that provides specific criminal penalties to adults who are negligent in the safekeeping of guns that are used to injure or kill children.

3. The Michigan Department of Education: Take the lead in developing an education plan for family gun safety.

Accidental - Other Causes

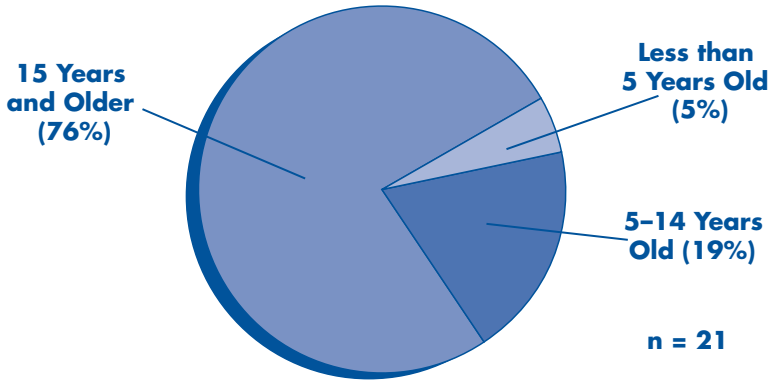
Key Findings

In 2002 and 2003, there were 56 Michigan children who died of unintentional injuries not addressed in previous sections, such as poisoning, falls and injuries sustained when the victims were crushed or struck by objects. CDR teams reviewed 41 such cases in 2002 and 2003.

Only one of the poisoning victims was less than four years old, while nearly three-quarters of the victims were ages 15 or older. Accidental overdose while trying to get high accounted for most of the adolescent poisoning deaths.

Of the 21 unintentional poisoning deaths reviewed, nine were by prescription drugs, six were by illegal drugs and six were due to carbon monoxide.

Accidental Poisoning Child Deaths Reviewed by Child's Age, 2002–2003



Five of the 41 child deaths reviewed in this category were from injuries sustained in falls, and nine cases involved children who died from injuries received when they were crushed or struck by objects.

Homicide - Firearm and Weapon

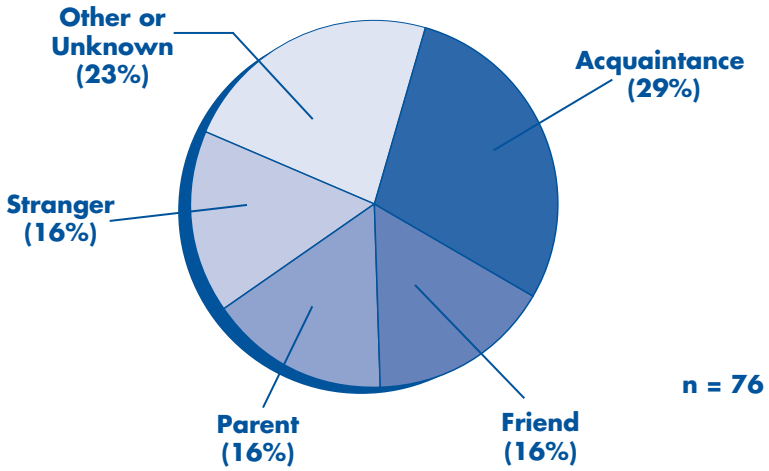
Key Findings

In 2002 and 2003, there were 92 child homicides caused by firearms and other weapons. This represents a 72% decrease from 141 deaths in 1990 to 40 deaths in 2003. CDR teams reviewed 76 firearm and weapon related homicides in 2002 and 2003.

Sixty-five percent of weapon homicides reviewed were to children ages 15-18. Seventy-one percent of these deaths were to black children. Approximately three quarters of the deaths were to children whose families were deemed to be of low socio-economic status.

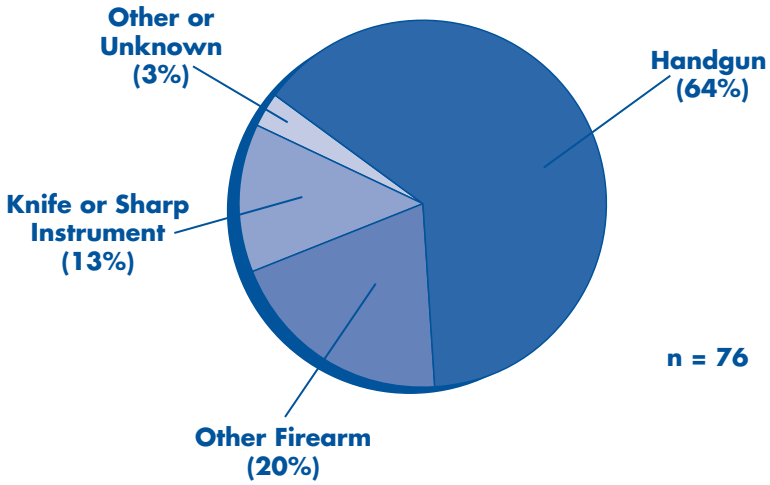
The perpetrator was most frequently an acquaintance (29%), followed by parents, friends or strangers (16% each).

Firearm and Weapon Child Homicides Reviewed by Person Who Inflicted Injury, 2002–2003



Ten of the 76 child homicides reviewed due to firearms or weapons included four sibling groups and were reported by MDHS to NCANDS as being due to child abuse or neglect.

Firearm and Weapon Child Homicides Reviewed by Type of Weapon, 2002–2003



Recommendations Regarding Firearm and Weapon Child Homicides

1. The Michigan State Police: Spearhead an initiative to partner with communities and local law enforcement experiencing high rates of teen homicides, to identify the neighborhoods most at risk for gun homicides, and implement comprehensive violence-prevention initiatives.

2. Michigan Courts: Support enforcement of laws that require gun safety mechanisms on all firearms at the point of sale.

3. The Michigan Department of Community Health and the Michigan Department of Human Services: Work with local Community Mental Health to recognize and ensure treatment for the mental health needs of families.

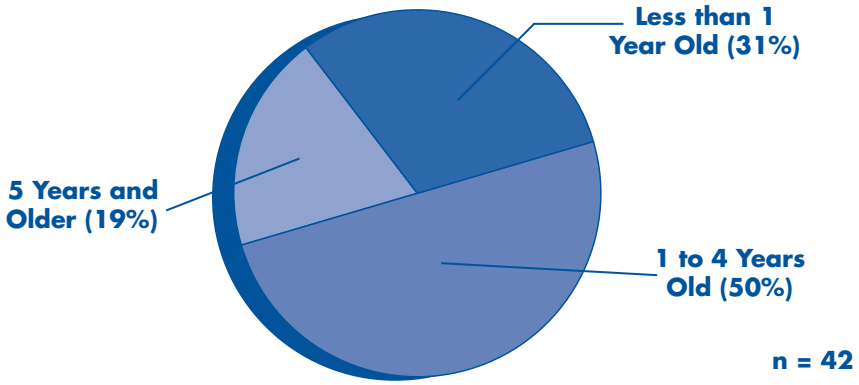
4. The Michigan Department of Community Health: Partner with the Michigan Chapter of the American Academy of Pediatrics to disseminate and implement the AAP's Violent Injury Prevention Program (VIPP) in primary care offices around the state.

Homicide - Child Abuse and Neglect

Key Findings

In 2002 and 2003, death certificate data indicates that 18 Michigan children died due to child abuse and neglect. However, CDR and the Michigan Department of Human Services identified 52 child abuse and neglect deaths in 2002. The process used to fully count maltreatment fatalities for 2003 has not yet been completed. CDR teams reviewed 42 child abuse and neglect homicides in 2002 and 2003.

Child Abuse and Neglect Homicides Reviewed by Child's Age, 2002–2003



Recommendations Regarding Child Abuse and Neglect Homicides

1. The Michigan Department of Human Services, Michigan Department of Community Health and Michigan Department of Education: Ensure that human service professionals working with high-risk families are knowledgeable about support programs and resources for new families, especially Maternal Support Services, Infant Support Services and other State and community-based primary and secondary prevention programs.

2. The Michigan Department of Human Services, Michigan Department of Community Health and Michigan Department of Education, in partnership with other disciplines: Develop (and Michigan Legislature: allocate funds for) home visitation programs using best practices, with home nursing as a component, targeting low-income, at-risk children/families.

3. The Michigan Department of Human Services and the Children's Trust Fund: Continue the Shaken Baby Syndrome Prevention campaign.

4. The Michigan Health and Hospital Association: Implement, statewide, the Children's Trust Fund Shaken Baby Syndrome prevention information/programs.

5. The Children's Cabinet: Commission research identifying the risk and protective factors for fatal child maltreatment.

Homicide - Other Causes

Key Findings

In 2002 and 2003, there were 37 Michigan children who died due to homicides of causes other than firearm and weapon or child abuse and neglect. CDR teams reviewed 17 such cases in that same time period. Over half (53%) of these deaths were to children under the age of five.

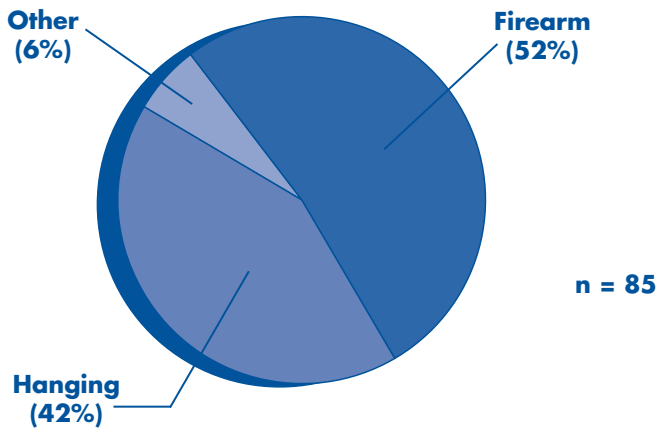
This category includes intentional deaths that resulted from poisoning, motor vehicle crashes, drowning, suffocation/strangulation and fire/burns.

Suicide

Key Findings

There were 97 child suicides in Michigan in 2002 and 2003. Sixty-five percent of these deaths were to white males ages 14-18. The most frequent method of suicide was firearms (47), followed by hanging (42). CDR teams reviewed 85 teen suicides in 2002 and 2003.

Child Suicides Reviewed by Method, 2002–2003



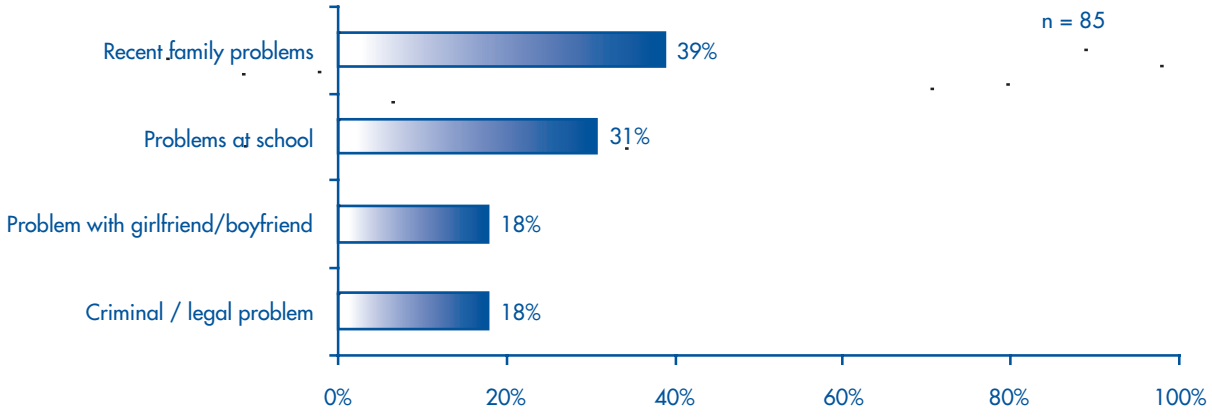
Teams considered most youths completing suicide (51%) to be of middle socio-economic status (SES). Of the remaining suicide completers, 26% were of low SES, and in 20% of the cases, SES was unknown.

Of the 44 firearm suicides reviewed, 40 youths accessed guns that were not stored in locked cabinets, and only two of the guns used were known to have had a trigger lock.

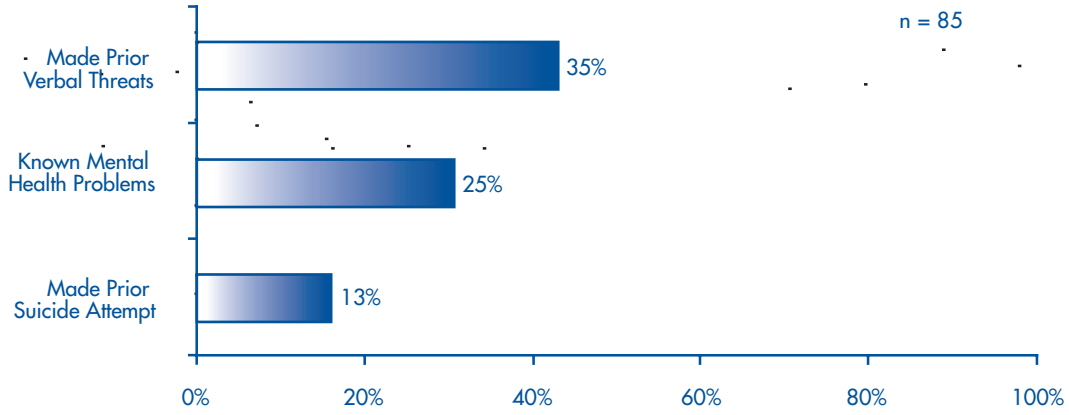
Often, a precipitating event can be identified as a factor that contributed to the suicide. Other suicides occur with no indication as to why it happened. As they reviewed the deaths, teams found that 38% of the suicides appeared to be completely unexpected.

A total of 15 youths (18%) had illegal drugs, alcohol or both in their systems at the time that they committed suicide.

Child Suicides Reviewed by Precipitating Event, 2002-2003



Child Suicides Reviewed by Risk Factors, 2002-2003



Recommendations Regarding Child Suicides

1. The Michigan Department of Community Health: Take the lead in collaborating with the Michigan Department of Education and Michigan Department of Human Services to support the development and implementation of a state suicide prevention plan.

2. The Office of the Governor: Support the State Mental Health Commission in addressing the access to services for youths at risk for suicide.

3. The Michigan Department of Community Health: Lead a collaboration between community mental health, the Michigan Health and Hospital Association and the Michigan Department of Education, to ensure that bereavement services are available to all children who have experienced the recent death of a family member or close friend.

4. The Michigan Department of Community Health: Ensure that parents, teachers and professionals in the fields of public and mental health, substance abuse and juvenile justice have an awareness of the risk factors of youth suicide and how to access intervention services by providing educational training and materials.

Undetermined Manner

Key Findings

In 2002 and 2003, death certificates recorded that 31 Michigan children died of undetermined manner. CDR teams reported reviewing 106 child deaths of undetermined manner in those two years. The main reasons for the discrepancy in numbers are: (1) manner of death is unavailable from Vital Records, so SIDS and other unexpected infant mortality are considered "Natural" manner under the cause of death coding rules of the National Center for Health Statistics, regardless of whether the local medical examiner called the manner "Undetermined"; and (2) death certificates may include additional information from the certifying physician or have been amended since the time that CDR teams conducted the review.

Of the 106 deaths reviewed due to undetermined manner: 50% were sleep related deaths to infants; 11% were overdoses; 9% were suspicious of child abuse or neglect; 8% were known to be self-inflicted, but intent was unclear; and 23% involved various other individual circumstances.

Recommendation Regarding Child Deaths of Undetermined Manner
[Note: this recommendation is also listed in the SIDS and Suffocation/Strangulation sections.]

1. The prosecuting attorney, law enforcement agencies, medical examiner and the Department of Human Services in every county: Upon the promulgation of rules by the Michigan Department of Community Health per Public Act 179 of 2004, jointly adopt and implement the child death scene investigation protocols.

The Fetal and Infant Mortality Review Process

Fetal and Infant Mortality Review (FIMR) teams provide an on-going community needs assessment with the goal of improving birth outcomes. The Michigan model of close collaboration between FIMR and CDR is nationally recognized. There are currently 14 FIMR teams in Michigan, which represents counties that have 68% of the infant mortality in the state.

The Michigan Department of Community Health (MDCH Title V) continues to support the FIMR teams with technical assistance and statistical and epidemiological information. Above all, the development of state support for local FIMR teams was designed to help improve birth outcomes in Michigan. Having experienced essentially no reduction in infant mortality since 1996, despite some continued reductions in other areas of the nation, Michigan is determined to improve this picture. The current Title V and five-year plan includes information gained from local FIMR findings and calls for continuation of this process.

Data are collected from a variety of sources prior to the review meeting. These may include prenatal care history, maternal hospitalizations, labor and delivery records, infant hospital records (pre and post discharge), well baby and sick baby visits, infant emergency department and hospital readmissions, DHS history, police records, support services such as WIC, MSS and ISS. An interview with the family, particularly the mother, is also conducted.

A de-identified case summary is then prepared and presented to the Community Review Team (CRT) by the local coordinator/facilitator, and each case is examined for the significant social, economic, public health, educational, environmental and safety issues related to the death. Team members capture issues associated with and contributing to the death while asking the questions:

- Did the family receive the services or community resources they needed?
- Are there gaps in the systems?
- What does this case tell us about how families use the existing local resources?
- What are the barriers to care?
- What are the trends in service delivery?
- What can be done to improve policies that affect families?

After thorough discussion and review, recommendations are formulated and passed on to the Community Action Team (CAT) for consideration and possible implementation.

Michigan Fetal and Infant Mortality Review Statistics

Local FIMR teams remain concerned about the number of infant deaths associated with less than adequate prenatal care, regardless of the cause of death. In 2002 and 2003 case reviews, 50% of moms entered care during their first trimester (the first 12 weeks of pregnancy), and fewer than one in three moms received "adequate" prenatal care (taking into account the necessary number of prenatal care visits based on Kessner's Index).

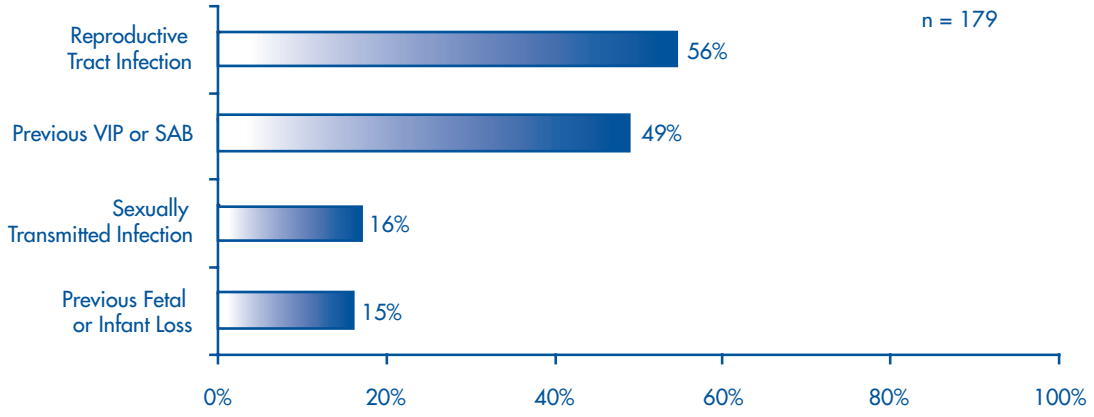
The majority of deaths reviewed by FIMR teams in 2002 and 2003 were neonatal deaths (68%), before the 28th day of life. Most of these neonatal deaths were related to complications caused by prematurity and low birth weight. FIMR teams collect information on multiple factors known to be highly associated with infant deaths due to prematurity.

Infections, such as bacterial vaginosis (BV) and sexually transmitted infections, are thought to pre-dispose a woman to preterm labor. Other events that may weaken the cervix, such as previous elective abortion,

spontaneous miscarriage, previous infant loss or stillbirth have been identified as risk factors for preterm delivery.

- Over half of the women had a reproductive tract infection (such as bacterial vaginosis or chorioamnionitis) or sexually transmitted disease.
- Nearly half of the women had had either a previous voluntary interruption of pregnancy (VIP) or a spontaneous miscarriage (SAB).
- Previous loss of either a live born or stillborn infant affected about one in seven of the women whose babies died due to prematurity.

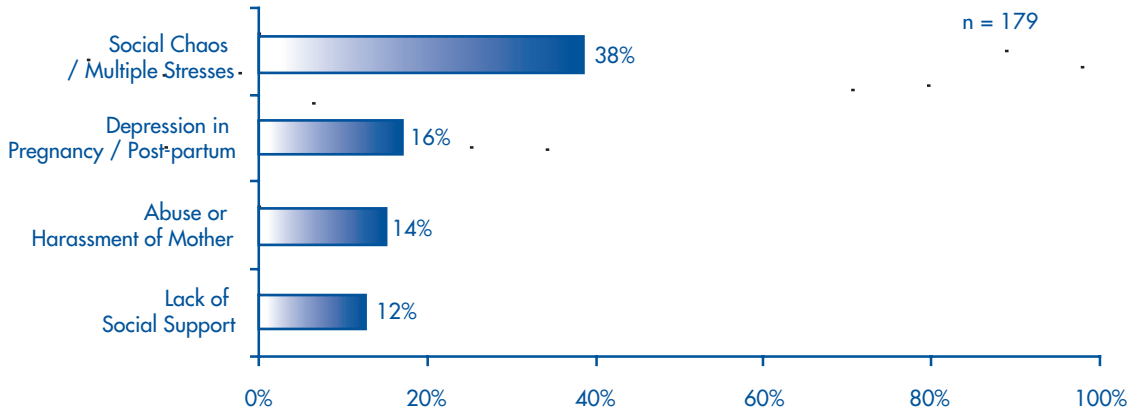
Infant Deaths From Prematurity Reviewed by Maternal Medical Conditions, 2002-2003



Poverty, stress and lack of social support have been emerging as factors that may play a role in predisposition to pre-term labor, especially for black women:

- One in eight women lacked social support from their families or communities.
- Depression or other mental illness during pregnancy was also a significant risk factor, occurring in one in six women.
- Over a third of women were identified as having multiple stressors or "social chaos" present in their lives.
- One in seven women suffered from abuse or harassment at some point in their lives.

Infant Deaths From Prematurity Reviewed by Maternal Psychosocial Factors, 2002-2003



Recommendations Regarding the FIMR Process

These recommendations have been reviewed and supported by the State FIMR Network for further consideration by the Michigan Department of Community Health.

1. Reinvest in outreach – restore outreach funding for public health programs to link women to health services.
   a. Expand indigenous paraprofessionals to identify and provide outreach to pregnant women and women with children under one year of age.
2. Pregnancy prevention and family planning – increase access to pregnancy prevention and family planning services as a primary prevention model.
   a. Address unintended pregnancy through exploration of the submission of a family planning 1115 waiver.
   b. Health education for women of childbearing age that includes information on nutrition, folic acid, and substance abuse.
3. Improve insurance options for adult non-pregnant women – any consideration for expanding health insurance programs should include preconception care for women who are not pregnant and of childbearing age (19-44 years).
4. Coordination of services – the state must assess its own programs, providing a state "mapping" of services that communities can then use to create a seamless system of care for women.
   a. Support the location of Women Infants and Children (WIC) services in complexes with doctor's offices and other centralized services.

Recommendations Regarding the FIMR Process Continued...

5. Expand services that enhance access for high-risk populations:
   a. Increase Federally Qualified Health Centers (FQHCs) in both Detroit and in the outstate region.
   b. Develop and implement standards of care for women's health care services similar to the Early and Periodic Screening Diagnosis and Treatment (EPSDT) model of care for children.
   c. Increase public and private investments in school-based and school-linked health services.
6. Encourage local community planning and collaboration – community planning and collaboration must be supported, developing culturally and geographically appropriate public and private services that are sensitive to the needs of that particular community.
   a. Partner with employers to expand pregnancy and parenting friendly policies in workplaces.
7. Collect and analyze data for infant mortality and maternal services:
   a. Continue to collect and analyze data from FIMR sites. Target the communities with the highest infant death rates and greatest racial disparities. Consider providing seed monies to new and developing teams. And, continue technical assistance to established review and community action teams.
   b. Implement a data collection system statewide for Maternal Support Services/Infant Support Services (MSS/ISS) that includes consistent assessment of client needs and services provided.
   c. Evaluate the Medicaid data to determine how infant mortality is impacted by barriers to access such as Medicaid reimbursement policies, transportation reimbursement and provider resources/availability.
   d. Collect data for the Maternal Morbidity Review process that focuses on prematurity, low birth weight and infant mortality including chronic diseases and behavioral factors such as the impact of stress and abuse of women of childbearing age and their families.

APPENDICES

Keeping Kids Alive©

Appendix A
Actions Taken on Recommendations from Previous Annual Reports

Regarding the Child Death Review Process:

1. Consider a state-level mechanism to assist and support local teams in developing protocols to ensure that they have timely and complete access to all information necessary for an effective review. (from 2nd annual report)
   Update: Michigan Public Health Institute now has an agreement with the Michigan Department of Community Health, Division for Vital Records and Health Statistics, on obtaining death certificates for local CDR Teams. Still, teams often lack needed information, especially medical records and if the child died in another county.

2. Provide training on the child death review process and on child death prevention to other organizations and systems. (from 2nd annual report)
   Update: CDR staff present information on child death review to many state organizations; Child Welfare Institute staff have attended the annual CDR training.

Regarding SIDS and Infant Suffocations:

3. The Michigan Department of Community Health, the Family Independence Agency, Michigan State Police, Chiefs of Police, Michigan Sheriff's Association, Michigan Association of Medical Examiners and Prosecuting Attorneys Association of Michigan should collaborate to ensure statewide utilization of Michigan standards for child death scene investigations using the *State of Michigan Protocols to Determine Cause and Manner of Sudden and Unexplained Child Deaths* as a model. (from 4th annual report; similar recommendation in 2nd annual report)
   Update: As of 7/1/ 2004, Public Act 179 states, in part, "The Department of Community Health shall promulgate rules and regulations under this act to promote consistency and accuracy among county medical examiners and deputy county medical examiners in determining the cause of death under this section. The department may adopt, by reference in its rules, all or any part of the "State of Michigan Protocols to Determine Cause and Manner of Sudden and Unexplained Child Deaths" published by the Michigan child death review program." MDCH is currently convening a multi-disciplinary group to advise them on this law.

4. Develop a statewide campaign on safe infant sleeping environments following the recommendations of the Consumer Product Safety Commission, and include a special focus on babysitters and child care providers. (from 2nd annual report)
   Update: MDCH is currently in collaboration with FIA, Tomorrow's Child, CDR and local community reps to develop a statewide campaign on safe infant sleep.

5. Incorporate SIDS risk reduction and safe infant sleep materials in Michigan's statewide prenatal smoking cessation programs.
   Update: Current state prenatal smoking cessation programs now include safe sleep materials.

6. Encourage local jurisdictions to require that medical examiners and law enforcement officers assigned to investigate child deaths be trained on protocols for investigating child deaths modeled after the *State of Michigan Protocols to Determine Cause and Manner of Sudden and Unexplained Child Deaths*. (from 3rd annual report)
   Update: The Michigan CDR program, with funding from the Governor's Task Force on Children's Justice, held three trainings on child death scene investigation in the spring of 2003. These trainings encouraged the use of the State of Michigan Protocols to Determine Cause and Manner of Sudden and Unexplained Child Deaths. A coordinated approach to investigations was recommended.

7. Expand state efforts to educate parents on safe infant sleep, including an emphasis on the risk of SIDS and suffocation when infants sleep on the same surface with others. (from 3rd annual report)
   Update: Tomorrow's Child has worked on this issue and developed a safe sleep brochure that has been widely distributed.

Appendix A
Actions Taken on Recommendations from Previous Annual Reports

Regarding Child Deaths from Natural Causes:

8. The Michigan Department of Community Health and the Family Independence Agency should support a partnership and the sharing of information between the Michigan Child Death Review Program and the Michigan Asthma Coalition to improve the diagnosis, treatment and prevention of childhood asthma. (from 4th annual report; similar recommendation in 3rd annual report)
   Update: MPHI currently is involved with the Michigan Asthma Coalition. The goal of the partnership is to learn from the asthma deaths that have already occurred to improve treatment and education for parents and physicians.

Regarding Motor Vehicle Crash Deaths:

9. The Michigan Legislature should amend the current graduated licensing law to place limits on the number of teen passengers allowed in vehicles driven by teens with Level Two Intermediate Licenses. This limitation should apply at all times of the day. (from 4th annual report; similar recommendations in 2nd and 3rd annual reports)
   Update: House Bill 4600 was passed by the House on Oct 30, 2003 which addressed this issue; however, the bill was amended to allow written exception permission from the teen drivers' parents. The bill was voted down in the Senate.

10. The Michigan Legislature should amend the Michigan Child Passenger law to:

    a. Require the use of a belt positioner for booster seats to protect children over age four and up to age eight and 80 pounds.

    b. Increase fines and points for those not following the law.

    c. Increase public awareness and education programs.
       Update: House Bill 4200 was introduced and referred to the Transportation Committee on 2/12/03. This bill would require that children between 40-80 lbs. and less than 4'9" in height be seated in a booster seat secured by a safety belt. Senate Bill 996 was introduced and referred to the Transportation Committee on 2/17/04. This bill would increase the fine for seat belt and child safety seat violations from $10 to $80. These bills have been the topic of meetings and hearings, but have not yet been voted upon.

Regarding Fire Deaths:

11. Encourage the Consumer Product Safety Commission to require the furniture manufacturing industry to expand the current fire retardant standards for upholstered furniture beyond commercial aircraft and prisons, to include furniture made for residential use. (from 2nd annual report)
    Update: The CPSC held a public meeting in June 2002 addressing the issue. The CPSC staff will send an updated regulatory options package within the next year to the CPSC. It will contain a revised draft standard and recommendations regarding alternatives to address fire risks association with upholstered furniture. As of 7/04, this was still in debate at the CPSC.

12. The Michigan Department of Community Health and the Michigan State Police should collaborate to develop an awareness campaign on the increased risks of fatal house fires when children play with incendiary devices. (from 4th annual report)
    Update: In February 2001, the Michigan State Police's Teaching, Educating And Mentoring (T.E.A.M.) school liaison program incorporated an additional training module on fire safety. The curriculum, taught in four graduated segments across K-12th grades, specifically addresses the risks and consequences of playing with fire.

Appendix A
Actions Taken on Recommendations from Previous Annual Reports

Regarding Drownings:

13. The Family Independence Agency's Office of Children and Adult Licensing should review current day care licensing guidelines for barriers to pools, hot tubs or open bodies of water at regulated day care homes. (from 4th annual report; similar recommendations in 2nd and 3rd annual reports)
Update: The new draft rules for day care homes state: "R 400.1814b. Water hazards and water activities. Rule 14b. (1) Each licensee/registrant must ensure that barriers exist to prevent children from gaining access to any swimming pool, drainage ditch, well, pond or other body of open water located on or adjacent to the property where the day care home is located. Such barriers must be of a minimum of 4 feet in height and appropriately secured to prevent children from gaining access to such areas. (2) The use of spa pools, hot tubs and fill-and-drain wading pools is prohibited. (3) Hot tubs and spas, whether indoors or outdoors, must be inaccessible to children and have a locked hard cover." Representatives from the CDR State Advisory Team met with the director of Children and Adult Licensing in July 2004 to discuss the role of CDR and make recommendation on the new licensing rules for child care. The rules change process is ongoing.

Regarding Child Abuse and Neglect Deaths:

14. The Michigan Department of Community Health, the Family Independence Agency and the Michigan Department of Education should collaborate in developing a nurse home visitation program targeting low-income first-time mothers based upon the successful "Nurse Family Partnership" model developed by Dr. David Olds. (from the 4th annual report; similar recommendations in the 2nd and 3rd annual reports)
Update: The abovementioned agencies are collaborating with the National Nurse Family Partnership, Inc. to implement a project to help first time parents succeed in Michigan. In FY 2004, four low-income cities were selected to pilot the NFP program. A team of four nurses and a supervisor from the three new cities attended the first phase of specialized training in Denver, CO in January 2004 and have begun providing services.

15. Ensure that the Family Independence Agency's Children's Protective Services worker training emphasizes assessment for medical neglect. (from 2nd annual report)
Update: A training session in medical issues in child abuse cases was developed and provided in March of 2004. In addition, Medical Resource Services offers case specific support through consultation with field staff, and reviews of medical records in order to provide in-depth explanations of medical findings relevant to child abuse and neglect cases.

16. The Family Independence Agency should increase and improve the resources available to educate and support the medical community and other mandated reporters to understand, identify and report suspected child abuse and/or neglect. (from 4th annual report)
Update: A guide for mandated reporters was recently released by DHS. It is to serve as a tool to identify, educate and encourage reporting by mandated reporters, as well as outline the civil duty and process for reporting. Specialized training for the reporting process is currently available through the Medical Services Advisory and Prosecuting Attorneys Association of Michigan.

Regarding Suicides:

17. The Michigan Surgeon General should lead the effort to develop an Adolescent Suicide Prevention and Services strategic plan in accordance with the U.S. Surgeon General's Call to Action for Suicide Prevention. (from 4th annual report; similar recommendation in the 3rd annual report)
Update: The Michigan Suicide Prevention Coalition has been convened, consisting of representatives of the Child Death Review program, the Michigan Department of Community Health, the Department of Education and various other state and local organizations. A draft plan has been drawn up and was

Appendix B
Local Child Death Review Team Coordinators, 2002–2003

County	Coordinator(s)	Agency
Alcona	Doug Ellinger, Sheriff	Alcona County Sheriff's Department
Alger	Patricia Webster, Nursing Administrator	LMAS District Health Department
Allegan	Cathy L. Weirick, Executive Director	Allegan County CA/N Council
Alpena	Cindy Shackleton	Alpena County DHS
Antrim	Bob Lewis, Services Supervisor	Antrim County DHS
Arenac	Brian Millikin	Arenac County DHS
Baraga-Houghton-Keweenaw	Dr. Gail Shebuski, Health Officer/ Medical Director	Western UP Health Department
Barry	Dr. Jeff Chapman, Medical Examiner	Barry County Medical Examiner
	Ann Wilson	Barry County Medical Examiner's Office
Bay	Dominic Wright, Victim's Advocate	Bay County Prosecutor's Office
Benzie	Jenifer Murray, Personal Health Director	Benzie-Leelanau District Health Dept
Berrien	Margaret Penninger, Assistant Prosecutor	Berrien County Prosecutor's Office
Branch	Kim McFellin	Branch County DHS
Calhoun	Renay Montgomery	Calhoun County Health Department
Cass	Ruth Andrews, Director	Woodlands Behavioral HC Network
Charlevoix-Emmet	Rhonda Buchanan	Charlevoix Emmett DHS
	Jenny Deegan	Charlevoix Prosecutor's Office
Cheboygan	Dr. Howard Otto, Medical Examiner	Cheboygan Co Medical Examiners Office
Chippewa	Vicki Schuurhuis, Clinical Director, OB/ Nursery	War Memorial Hospital
Clare	Kathy Kent, Nursing Supervisor	Central Michigan District Health Dept
Clinton	Mary Pino, Chief Assistant Prosecutor	Clinton County Prosecutor's Office
Crawford	Amelia Afsari, Epidemiologist	District Health Department #10
Delta	Renee Barron	Delta-Menominee District Health Dept
Dickinson-Iron	Carol Thornton	Dickinson-Iron County DHS
Eaton	Linda Potter, RN	Barry-Eaton District Health Department
Genesee	Dr. Gary Johnson, Medical Director	Genesee County Health Department
	Pamala Watkins, Medical Examiner Investigator	Genesee County Health Department
Gladwin	Robert Adams, Director	Gladwin County DHS
Gogebic	Dr. Charles Iknayan, Medical Examiner	Grandview Hospital
Grand Traverse	Deanna Kelly	Grand Traverse County Health Dept
	Mary Merwin	GT County Multi-purpose Collaborative
Hillsdale	Valerie White, Assistant Prosecutor	Hillsdale County Prosecutor's Office
Huron	Mark Gaertner, Prosecuting Attorney	Huron County Prosecutor's Office
	Elizabeth Weisenbach, Assistant Prosecutor	Huron County Prosecutor's Office
Ingham	Dr. Dean Sienko, Medical Examiner	Ingham County Health Department
Ionia	Tim Click, Children's Services	Ionia/Montcalm County DHS
Iosco	Carla Grezeszak, Family Division Administrator	Iosco County Family Court
Isabella	Mari Pat Terpening, Personal Health Svcs Supervisor	Central Michigan District Health Dept

Appendix B
Local Child Death Review Team Coordinators, 2002–2003

Jackson	Jill Glair	Jackson County Health Department
Kalamazoo	Joni Idzkowski, Personal Health Services Supervisor	Kalamazoo Human Services Department
Kalkaska	Amelia Afsari, Epidemiologist	District Health Department #10
Kent	Tracy Cyrus, Child Protection Team	DeVos Children's Hospital
	Carmen Perez	Kent County Health Department
Lake	Amelia Afsari, Epidemiologist	District Health Department #10
Lapeer	D/Sgt. Nancy Stimson	Lapeer County Sheriff's Department
	Gerald Redman, Acting Program Manager	Lapeer County DHS
Leelanau	Sara Brubaker, Prosecuting Attorney	Leelanau County Prosecutor's Office
	Laurie laCross, Victims Advocate	Leelanau County Prosecutor's Office
Lenawee	Larry W. Stephens, Health Officer	Lenawee County Health Department
Livingston	Dr. Stan Reedy, Medical Director	Livingston County Health Department
	Elaine Brown, Personal and Prevention Health Services	Livingston County Health Department
Luce	Dr. James Terrian, Medical Examiner/ Director	LMAS District Health Department
Mackinac	Sgt. Mark Wilk	St. Ignace Police Department
Macomb	Dr. Kevin Lokar, Medical Director	Macomb County Health Department
	Angelo Nicholas, Director; Brenda Piekarski	Macomb County DHS
Manistee	Ford Stone, Chief Prosecutor	Manistee County Prosecutor's Office
Marquette	Diane Curry, Health Educator	Marquette County Health Department
Mason	Richard Trier, Service Manager	Mason County DHS
Mecosta	Amelia Afsari, Epidemiologist	District Health Department #10
	Kevin Courtney, Director	Big Rapids Dept of Public Safety
Menominee	Renee Barron	Delta-Menominee District Health Dept
Midland	Dr. Dennis Wagner, Deputy Medical Examiner	Mid-Michigan Regional Medical Center
	Andrea Muladore, ACSW	Mid-Michigan Regional Medical Center
Missaukee-Wexford	Dave VanHouten, Children's Services Supervisor	Missaukee-Wexford DHS
Monroe	Sandie Pierce	Monroe CMH Authority
Montcalm-Gratiot	Jamie Lovelace, Children's Services Supervisor	Ionia Montcalm District DHS
	Bonnie Ayers	Mid-Michigan District Health Dept
Montmorency	Denise Benson, Services Supervisor	Montmorency County DHS
Muskegon	Joyce L. deJong, DO, Chief ME	Muskegon County Health Department
	Roberta Skinner, Records Office	Muskegon County Health Department
Newaygo	Richard W. Peters, MD	Mercy General Health Partners
	Amelia Afsari, Epidemiologist	District Health Department #10
	Kevin Sweeney	Michigan State Police

Appendix B
Local Child Death Review Team Coordinators, 2002–2003

Oakland	Ronald E. Covault, Deputy Prosecutor	Oakland County Prosecutors Office
	James Halushka, Deputy Prosecutor	Oakland County Prosecutors Office
Oceana	Amelia Afsari, Epidemiologist	District Health Department #10
	Rahel Sollner, CPS Supervisor	Oceana County DHS
Ogemaw	Dr. James Hall, Pathologist/ME	HistoDiagnostic
Ontonagon	Sue Gilbault, Outreach Coordinator	Barba Kettle Gundlach Shelter
	Janet Holstrom	Ontonagon County DHS
Osceola	Kaye Frederick	Osceola County Probate Court
	Becky Johnson-Himes	Central Michigan District Health Dept
	MarJean Farr, CPS Supervisor	Osceola County DHS
Oscoda	Joan Fox, Services Supervisor	Oscoda County DHS
Otsego	Kevin Hessselink, Prosecuting Attorney	Otsego County Prosecutor's Office
Ottawa	Tom Perna, CPS Supervisor	Ottawa County DHS
Presque Isle	John Keller	Alpena County DHS
Roscommon	Cynde Kochensparger, Nursing Supervisor	Central Michigan District Health Dept
Saginaw	Kristan Outwater, MD	Partners in Pediatrics
	Debbie Tubb, ME Investigator	Saginaw County Health Department
St. Clair	Amy Smith, Planning Officer	Community Mental Health
St. Joseph	Elizabeth O'Dell, Collaborative Coordinator	St. Joseph Co Human Svcs Commission
Sanilac	Dennis Smallwood, DO, Medical Examiner/Director	Sanilac County Health Department
Schoolcraft	Amy Powers, RN	LMAS Dist Health Department
Shiawassee	Cindy Eberhard, CPS Supervisor	Shiawassee County DHS
	Rose Mary Asman, Pers Health Services Director	Shiawassee County Health Dept
Tuscola	Dennis Smallwood, DO, Medical Examiner/Director	Tuscola County Health Department
Van Buren	Trooper Paula Doan	Michigan State Police
	Sandy Nicholas	Van Buren/Cass District Health Dept
Washtenaw	Susan Gialanella	Washtenaw County Human Services
Wayne	Pat Soares	Wayne County Health Department
	Dr. Charles Barone	Henry Ford Hospital
	Teresa Marshall, Child and Family Services	Wayne County DHS

Appendix C
Number of Cases Reviewed by CDR Teams by County

County	Number of Reviews in 2002	Number of Reviews in 2003	Number of Reviews 1995–2003
Alcona	2	1	4
Alger	0	2	5
Allegan	12	9	57
Alpena	0	0	10
Antrim	0	0	0
Arenac	2	1	6
Baraga	0	0	0
Barry	10	6	54
Bay	2	2	20
Benzie	0	1	1
Berrien	33	41	278
Branch	6	6	35
Calhoun	4	0	142
Cass	9	9	47
Charlevoix	6	0	8
Cheboygan	0	0	4
Chippewa	3	5	24
Clare	0	3	8
Clinton	18	10	53
Crawford	0	0	18
Delta	4	0	11
Dickinson	4	2	9
Eaton	9	4	68
Emmet	4	0	7
Genesee	21	18	96
Gladwin	2	5	23
Gogebic	2	0	2
Grand Traverse	0	5	6
Gratiot	6	5	31
Hillsdale	2	6	25
Houghton	0	0	0
Huron	0	5	18
Ingham	10	16	64
Ionia	12	6	38
Iosco	10	2	18
Iron	0	2	2
Isabella	7	13	47
Jackson	13	10	62
Kalamazoo	28	23	132
Kalkaska	0	0	4
Kent	85	81	440

Appendix C
Number of Cases Reviewed by CDR Teams by County

Keweenaw	0	0	0
Lake	0	2	11
Lapeer	17	13	73
Leelanau	0	5	7
Lenawee	1	9	50
Livingston	23	15	104
Luce	2	1	13
Mackinac	4	0	16
Macomb	31	21	157
Manistee	0	0	5
Marquette	0	0	10
Mason	0	0	16
Mecosta	6	5	61
Menominee	0	4	11
Midland	6	8	33
Missaukee	5	4	14
Monroe	26	14	68
Montcalm	7	17	87
Montmorency	3	0	3
Muskegon	10	9	88
Newaygo	10	6	39
Oakland	55	43	259
Oceana	10	4	40
Ogemaw	0	0	0
Ontonagon	1	1	2
Osceola	1	2	19
Oscoda	0	0	0
Ostego	4	0	14
Ottawa	24	12	103
Presque Isle	0	0	2
Roscommon	2	0	13
Saginaw	27	30	162
St. Clair	20	33	203
St. Joseph	23	11	75
Sanilac	1	1	11
Schoolcraft	1	1	2
Shiawassee	17	13	77
Tuscola	9	5	39
Van Buren	14	13	71
Washtenaw	11	14	75
Wayne	194	209	902
Wexford	8	4	34
Michigan	**899**	**828**	**4,846**

Data Source: Michigan Child Death Review, Michigan Public Health Institute

Keeping Kids Alive©

This report is written in memory of all of the children in Michigan who have died. The Michigan Child Death State Advisory Team issues this report with the hope that it will encourage additional efforts, both in local communities and among our state leaders, to keep every child in Michigan safe and healthy.

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