

EXECUTIVE SUMMARY

Cuyahoga County residents are affected by the death of a child because it is either a personal loss or a collective sadness. Family and friends mourn most deaths in relative privacy. Newspapers and television report on the public tragedies, sometimes pointing fingers and assigning blame in an effort to find an answer. Either situation requires us to consider *how* and *why* a child died, and ask if there is anything we could have done to prevent it.

The 2000 annual report of the Child Death Review Committee provides the community with information on how and why 237 children died in Cuyahoga County in 1999. This report focuses on what is currently being done to address causes of child deaths and what practices should be adopted to prevent future deaths. Statistical information gained from death certificates on all deaths is supplemented by information gained from the intensive, multidisciplinary review of 41% of all child deaths. In addition, 66 families agreed to share their experience through an in-depth home interview, improving our capacity to understand the circumstances of these deaths.

This work is the culmination of more than twelve months of effort by the committee and its three subcommittees. Made up of 29 members representing, 15 organizations, these individuals lend their expertise to improve the lives of children. The third annual report summarizes information on all 1999 deaths to children under 18 years of age in Cuyahoga County.

In-depth analysis of 1999 data shows that the leading causes of death in children vary somewhat by age group. Infants are more likely to die as a result of prematurity or birth defects, while older children are more likely to die as a result of unintentional injury or homicide. When aggregated, the leading causes of death for children in Cuyahoga County are: prematurity, birth defects, SIDS and/or sleep related deaths, homicide, suicide, unintentional injury and cancer.

One of the most compelling aspects of this year's report is the fact that the number of deaths to children in our community has continued to decline. In 1999 the county realized a new record low for child deaths, reducing the total number of deaths by 48% since the beginning of the decade. This report also represents the culmination of a stimulating year of procedural changes that have improved our capacity to know and understand the tragic deaths of our community's children.

Despite the many successes of 1999, there were still 237 infants and children who lost their lives and Cuyahoga County continues to have higher child mortality rates than the state and the nation. This realization must serve to strengthen our commitment to find effective intervention strategies to protect all our children.

Some of the more significant observations made when looking at trends over the past decade are:

- There were 219 fewer child deaths in 1999 than in 1990.
- There were 4 more infant deaths in 1999 than 1998. However, between 1990 and 1998 the infant mortality rate (IMR) continued to decline steadily, from 10.8 to 9.0 deaths per 1,000 live births.
 - The gap between the county and U.S. infant death rates has been reduced by 17%.
 - Neighborhoods in the Healthy Family/Healthy Start Program (HF/HS) area led the county in IMR reductions. Between 1990 and 1998 rates in the HF/HS areas dropped 40%.
 - Neighborhoods in the balance of the city of Cleveland saw declines of 34%.
 - In the county overall, excluding the HF/HS targeted areas, the IMR dropped by 27%.

- The number of deaths to children between 1 and 17 years of age (excluding infants) has dropped 53% since 1990.
 - There were 23 fewer deaths of children between 1 and 17 years of age.
 - The total number for children between 1 and 9 years old dropped by 24%.
 - The total number for children between 10 and 17 years old dropped by 31%.
- Forty two children were killed by guns between 1996 and 1999.
 - 5 unintentional injuries
 - 12 suicides (Between 1996 and 1999, 75% of all child suicides were committed with guns)
 - 25 homicides
- The 1990's saw declines in deaths of children in all racial groups.
 - The mortality rate among white children fell 53%.
 - The mortality rate among non-white children fell 46%.
 - The ratio of non-white to white mortality has shown no statistically significant change.
- The gender gap in child mortality has lessened over the past ten years.
 - Boys remain at slightly elevated risk, being 1.2 times more likely to die than girls.

Significant efforts have been made over the past twelve months to address the leading causes of child death in Cuyahoga County. County systems and community partners have implemented actions aimed at reducing preventable deaths in children based on recommendations outlined in last year's report.

The 2000 Cuyahoga County Child Death report focuses on the leading causes of death: prematurity, birth defects, SIDS and/or sleep related deaths, homicide, suicide, unintentional injury and cancer. Data driven recommendations that address the causes and identified contributing factors are made within each chapter and are summarized as follows.

PREMATURITY

In Cuyahoga County during 1999 there were 95 deaths due to prematurity. Prematurity is defined as the birth of a baby at less than 37 weeks gestation. It is one of the most complex health issues facing the community due to multiple contributing risk factors that interact with one another, and few clear-cut predictors that are amenable to intervention. Community leaders hoping to have a lasting impact on this devastating problem must work to develop care systems that view pregnant women holistically and acknowledge not only their physical needs, but their socioeconomic, educational, psychological, and emotional needs as well.

The impact prematurity has had and continues to have on our community is illustrated by the fact that:

- Prematurity continues to be the leading cause of child deaths in the community.
 - There have been slight declines in each of the past 4 years.
 - 114, 109, 100, and 95 deaths respectively for 1996 - 1999
 - Forty percent of all child deaths are due to prematurity
 - Fifty-four percent of all deaths to infants are due to prematurity

Of the 95 prematurity deaths, 23 were selected for in-depth review by the case review team. During the review process the significant contributing or associated risk factors identified included: poverty, lack of medical insurance, amount of prenatal care received, substance abuse, medical history, and domestic violence. In light of these factors, recommendations for action focus on expanding perinatal out-reach programs that serve at-risk pregnant women, as well as educating child-bearing women and the entire community on the importance of receiving early and consistent prenatal care, the dangers of substance use during pregnancy, and the importance of maintaining a healthy lifestyle and safe home environment.

BIRTH DEFECTS

During 1999 there were 37 deaths associated with birth defects in Cuyahoga County. A birth defect is an abnormality of structure, function or body metabolism (inborn error of body chemistry) present at birth that results in physical or mental disability, or even death. Both genetic and environmental factors can cause birth defects. There are more than 4,000 known birth defects, but the causes of about 60% of all birth defects remain unknown.

Local trends in child deaths associated with birth defects are illustrated by the following:

- The average number of deaths due to birth defects has dropped by 25%.
 - Between 1990 and 1995 the average number of birth defects related deaths was 40 per year.
 - Between 1996 and 1999 the average number of deaths due to birth defects was 30 per year
 - The “Folic Acid Campaign” has had a noticeable impact on birth defects
 - There have been no deaths due to neural tube defects since 1997.

Of the 37 deaths associated with birth defects, 19 received an in-depth review by the case review team. Common issues involved with the care of these children before their deaths include a lack of or incomplete insurance coverage, the need for multidisciplinary care planning, coordination of health services, and the need for quality respite services for families. In an effort to address these issues, recommendations for action focus on improved tracking of birth defects, expanded availability of and access to respite care services, and community education regarding the importance of healthy pre-pregnancy life styles for women of child-bearing age.

SUDDEN INFANT DEATH SYNDROME & SLEEP RELATED DEATHS

In Cuyahoga County during 1999 there were 25 sleep related deaths to infants ranging in age from two weeks to seven months of age. Sudden Infant Death Syndrome, or SIDS, is defined as the death of an infant less than one year of age when there are no identifiable signs of disease, trauma or illness and when there can be no other reasonable explanation for the death. Although SIDS continues to be the leading cause of death in infants between one month and one year of age, the nation has seen a drastic decline in the incidence of Sudden Infant Death Syndrome in recent years. Nationally, this decline has been attributed to the successful implementation of SIDS reduction initiatives such as the “Back to Sleep” campaign. Locally, procedural changes have led to more in-depth investigation of sleep related deaths in infants. As a result, some deaths that would previously have been classified as SIDS are now recognized as accidental suffocation. In many cases, there are circumstances surrounding the death which make it impossible to conclusively diagnose SIDS as the cause of death. These cases are now classified as “undetermined cause of death”. These changes in the way SIDS and sleep related deaths are classified at the local level may also help explain the declining SIDS rates.

- The death rate from SIDS has dropped to 1 death per 1,000 live births. However, the overall number of SIDS and sleep related deaths has been relatively constant.
 - At least 50% of infants who died of SIDS were on their abdomen.
 - Among cases of sleep related deaths whose cause was ruled “undetermined”, 64% were sharing their sleep environment with at least one other person.
 - “Back to Sleep” and “Safe Sleep Environment” educational efforts must be expanded.

Of the 25 sleep related deaths, 13 were determined to be a result of SIDS, and one case was ruled “accidental suffocation” as a result of an unsafe sleep situation. The remaining 11 cases involved concerns regarding the infants’ sleep environment, which made it impossible to rule out accidental suffocation. Therefore, these deaths were assigned an “undetermined” cause of death. Recommendations for action regarding sleep related deaths focus on intensifying community education about safe sleep practices and environments for infants, as well as targeting specific educational efforts at other care providers such as babysitters, daycare staff, and grandparents.

HOMICIDE

In Cuyahoga County, there were 10 child homicides during 1999, which were fewer than at any other time in the decade. This is the continuation of a downward trend that began in 1995.

- Since 1995, 81 children were murdered in Cuyahoga County.
 - 14 Infants.
 - 21 Children between the ages of 1 - 9 years.
 - 46 Children between the ages of 10 and 17 years.

Locally, a distinct trend in child homicide has been identified: infants and young children are most frequently the victims of a parent or care giver, whereas teens are more likely to die at the hands of peers. Because of this pattern, the homicide cases are categorized into two sub-sections: Child Abuse and Neglect Related Homicide and Teen Violence Homicide. Although it is important to distinguish between these two types of homicide, it should be noted that they share many risk factors.

Of the ten child homicides during 1999, four of the cases were the result of abuse and/or neglect, with the remaining six cases the result of teen violence. In two of the four abuse related cases there was a history of involvement with the Department of Children and Family Services. One of these cases was active at the time of the child's death and the other case had been closed. All four child abuse related cases involved multiple family stressors. Of the six teen violence related homicide cases all involved guns, with four of the six cases involving a juvenile gun access issue. Four of the six children had a history of involvement with juvenile court, three had a confirmed drug problem, two involved truancy, and one child was involved with a gang. Child homicide recommendations for action focus on expanding and strengthening services provided by community agencies working with at-risk families and children, as well as educating the community on violence related issues such as gun accessibility and safe gun storage.

SUICIDE

In Cuyahoga County during 1999 there were two teen suicide deaths. The death of an adolescent by his or her own hand is almost always a shock to family and friends. Clinical depression in an adolescent may be mistaken as nothing more than "teenage angst" and important warning signs are then missed. Depression that is not recognized, or is left untreated, may impair development and can result in death for children who become suicidal. Treatment of adolescent depression is successful in over 80% of cases.

The two suicide deaths in 1999 set a ten year low, though the number of suicide deaths continues to be changeable. Due to the difficult issues related to teen suicide, both cases received a comprehensive review. The following significant findings were identified: both cases involved self-inflicted gun shot wounds, truancy and a history of substance abuse. Both children exhibited "red flags" in the form of decreasing academic performance, trouble with the law, and/or signs and symptoms of depression. Recommendations for action focus on increasing community awareness of the signs and symptoms of depression and suicidal behavior in adolescents, increasing awareness of available community mental health services, and encouraging schools to incorporate suicide awareness into their curriculums aimed at breaking the "code of silence" within adolescent peer groups.

UNINTENTIONAL INJURY DEATHS

There were a total of 17 unintentional injury deaths to Cuyahoga County children in 1999, which is a sharp reduction from previous years. The reduction in the number of deaths for children between 1 and 9 years of age moved unintentional injuries from the leading cause of death for this age group to the third leading cause. However, unintentional injuries remained the leading cause of death for children between the ages of 10 and 17 in our community.

- The 17 unintentional injury deaths in 1999 represents a considerable decline from 37, which has been the average number of unintentional injury deaths per year between 1995 and 1998.
- The leading cause of unintentional injury deaths to children remains motor vehicle accidents.
 - In 1999 there were 10 deaths that results from 8 automobile accidents.
 - There were 6 passengers, 3 pedestrians, and 1 driver killed.
- The drastic declines seen in unintentional fire deaths in the mid 1990's have been sustained for five years.
 - In 1999, 3 children died in 2 house fires.
 - The average for the two five-year intervals (1990 - 1994 and 1995 - 1999) has fallen from 12.6 to 2.2 deaths per year.
 - This improvement was concurrent with the community-wide efforts to educate families on fire safety, and to distribute smoke detectors and batteries.
- For the second year in a row, there were no drowning deaths.
 - Of the data available on deaths that occurred before the end of August 2000, there were at least 3 drowning deaths.
- There were no deaths due to falls in 1999.
 - By the end of August 2000 there had been 2 deaths due to falls.
- Because deaths from preventable injuries often reappear after an absence, educational messages on accident prevention must be maintained.

Recommendations for action focus on increasing community awareness of the importance of keeping children safe from unintentional injuries. Because the largest number of unintentional injury deaths occurred as a result of automobile accidents, motor vehicle safety (universal use of seat belts and child safety seats, and safe driving practices) was especially emphasized.

CANCER

In Cuyahoga County during 1999 there were 8 cancer related deaths of children. Cancer is the leading fatal disease of children and adolescents under the age of twenty. However, it is also the most curable of all chronic childhood diseases. Up to 70% of all young people with cancer can be cured if they receive the best-known treatments at specialized childhood cancer centers. The success with which childhood cancer can be detected and treated is considered to be one of the medical miracles of our time. However, far too many children continue to suffer and lose their lives to this devastating disease. Therefore, there is a continuing need to further raise awareness and focus national and local attention on the issues affecting patients, survivors, families and caregivers.

Of the 8 cancer deaths during 1999, three were selected as part of the in-depth review process and have received a comprehensive case study. In all of the cases there were no significant social or medical findings, which is in keeping with what is known about childhood cancers. Recommendations for action focus on support of childhood cancer research, and increasing community awareness of programs such as the Minority Organ Tissue Transplant Education Program.