

**San Bernardino County
Child Death Review Team
Annual Report
2009 - 2010 Data**

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Background of the Child Death Review Team in San Bernardino County

California enacted legislation in 1988 which allowed the development of interagency child death review teams. These teams are intended to assist local agencies in identifying and reviewing child deaths and facilitating communication involved in the investigation of such cases. In response to this legislation, the San Bernardino County Child Death Review Team (CDRT) was formed to provide professional review of deaths of persons under the age of 18 who lived in San Bernardino County.

State law mandates that no less than once each year, each child death review team shall make available to the public; findings, conclusions and recommendations, including aggregate statistical data on the incidences and causes of child deaths (SB 1668 (e) (1)). Due to the sensitivity of the material discussed, confidentiality is maintained pursuant to California Penal Code 11167.5. The San Bernardino County CDRT is a multidisciplinary collaborative body guided by agreed upon goals and objectives.

The San Bernardino County CDRT reviews and evaluates the deaths of children less than 18 years of age reported to the Medical Examiner/Coroner's office. The hope is that, through a comprehensive and multidisciplinary review of child deaths, we will better understand how and why children die and use our findings to take actions to prevent other deaths, and to improve the health and safety of our children.

The team is composed of designated representatives from the following agencies:

Sheriff's Department, Crimes Against Children Division
Sherriff's Department, Coroner's Division
Children & Family Services
District Attorney's Office
Department of Public Health
Probation Department
Program Integrity Division
Loma Linda Medical Center
Arrowhead Regional Medical Center
Children's Network
Department of Behavioral Health
San Bernardino County Superintendent of Schools
Inland Regional Center
American Medical Response
Inland Counties Emergency Medical Agency

Prior to each meeting, selected CDRT members receive record check information of each child death to be reviewed for the month. The members research their own agency's files for additional information on the child and his/her family. All of the related information is then brought to the monthly meeting for disclosure, compilation, discussion, review and classification. A course of action is determined once the review is complete.

Executive Summary

A total of 435 child deaths occurred in 2009 and 380 child deaths occurred in 2010. Over two-thirds of children's deaths in 2009-2010 were designated as "natural" in manner of death. In fact, 361 of the child deaths in 2009 were "natural" in manner, while there were 299 in 2010. (Manner of death refers to how the person died and includes consideration of intention, circumstances, or action that led to the cause of death.) Natural manner deaths include those that were due to disease, congenital conditions, and/or perinatal causes.

This report will not focus on "natural" deaths. Rather, the focus will be deaths that occurred by the following manners: Accident, Traffic, Homicide, Suicide, and Undetermined. Hence, this report is exclusively focusing on 74 deaths from 2009 and 81 deaths from 2010 which occurred in an Accident, Traffic, Homicide, Suicide, or an Undetermined manner.

The data and cases that are being shared in this report were obtained through the Coroner's Case Management System.

Over half of the 74 deaths in 2009 (54% or 40 cases) were due to an accidental and traffic-related manner. In 2010, accidental deaths comprised 42% (34 cases) of the 81 child deaths. The types of accidental injuries includes the following in descending order: vehicular; drowning; blunt force head injury; asphyxia; thermocutaneous burns; choking; dog attack; drug overdose; and fall.

Homicide deaths among children doubled from 2009 (11 cases) to 2010 (22 cases). Of those deaths, there was a significant increase in the 0-5 age range with two classified as homicide in 2009 and 12 classified as homicide in 2010. Among those 12 homicide deaths, traumatic brain injury was the most common cause of death. There was no other age group that had any substantial change in the number of homicide deaths.

Deaths by suicide decreased by 30 % in 2010 from 10 to 7 cases. The majority of these deaths occurred among youth over 11 years of age.

A special focus area for our CDRT has been examining all sleep-related deaths of infants. In 2009 a total of 20 infants died, 14 of whom were in an un-safe sleep environment, primarily bed-sharing with a parent. In 2010, 25 infants died, 16 of whom were bed-sharing.

We invite interested parties to use this report's data for research or policy development purposes and to contact us if further information is required.

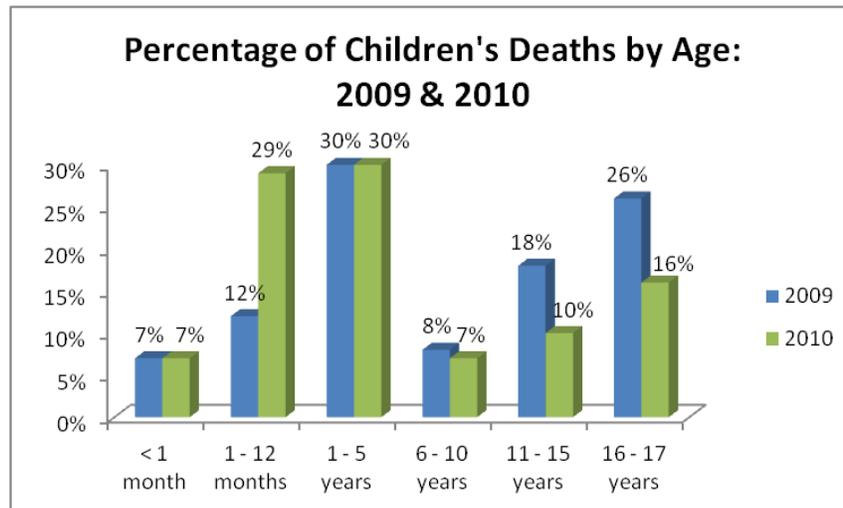
Demographics: 2009 and 2010

Age/Gender

During 2009, 361 deaths were determined to be Natural in manner, while there were 299 Natural deaths in 2010. This report, however, will not focus on these deaths. Rather, the focus will exclusively be on the 74 deaths of 2009 and the 81 deaths of 2010 that were classified as Accident, Traffic, Homicide, Suicide, or Undetermined in manner. The data and cases that are being shared in this report were obtained through the Coroner's database called the Coroner's Case Management System.

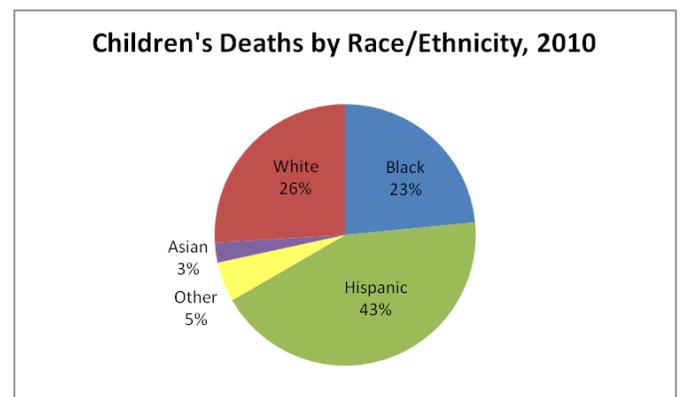
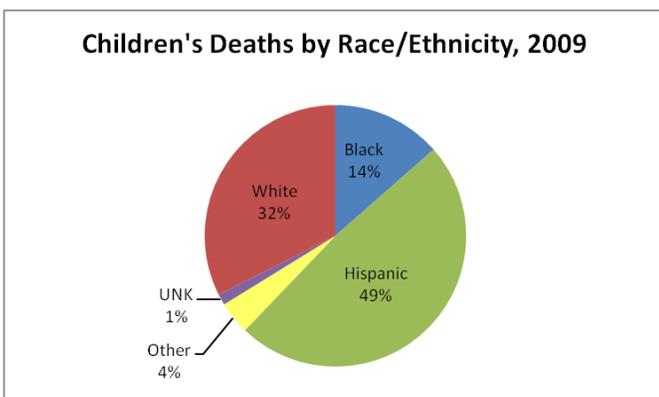
In 2009, 74 deaths were classified as being Accident, Traffic, Homicide, Suicide, or Undetermined in manner. Of these, 32% (24 cases) were female and 68% (50 cases) were male. In 2010, 81 deaths were reported to be of these same selected manners. Thirty-seven percent (30 cases) of these cases were female while 63% (51 cases) were male.

Children's deaths in San Bernardino County varied widely across the age spectrum; however, 49% (36 cases) of deaths occurred in children ages 0 - 5 in 2009 while 66% (54 cases) of child deaths were between the ages of 0 and 5 in 2010. A higher proportion of children were between ages 11 - 17 in 2009 (44%) than in 2010 (26%).



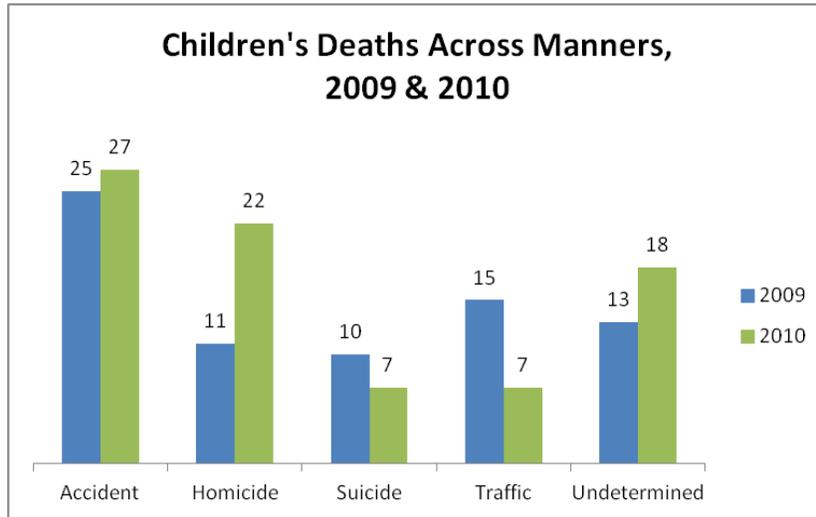
Race/Ethnicity

For both years, Hispanics represent the majority of children's deaths. Hispanics also represent approximately 49% of the San Bernardino County general population. Although children's deaths among Blacks are a smaller proportion when compared to Hispanics and Whites, they are over-represented in comparison to their 9% proportionality in the general San Bernardino County population.



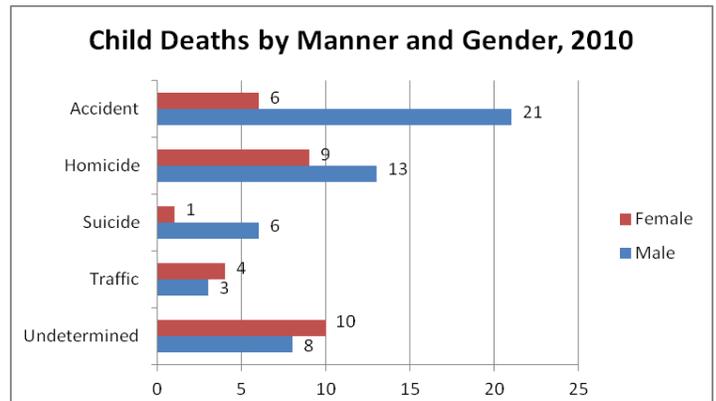
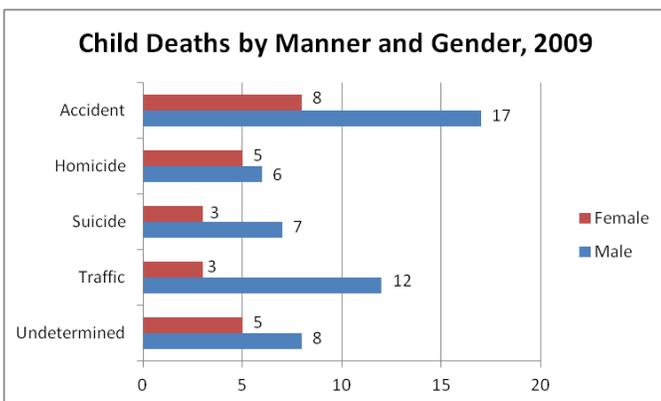
San Bernardino County Child Deaths Across Manners

In 2009, over half of all child deaths (54% or 40 cases) were due to accidental and traffic-related deaths. In 2010, accidental and traffic-related deaths comprised 42% (34 cases) of all child deaths. Homicide deaths among children doubled from 2009 to 2010, while suicide deaths dropped by 30% in 2010 from 10 to 7 cases. On the other hand, children's deaths that were classified as being undetermined in manner increased by 38% from 2009 to 2010 with 13 to 18 cases.



Child Deaths by Manner and Gender

Across all categories, males outnumbered females in 2009. In fact, males made up 75% of unintentional injuries (accident and traffic-related deaths) despite being only 68% of total child deaths for the year. There were three times as many male accidental deaths as there were female; however, there were three times as many female traffic-related deaths than males in 2010. More than half of suicides were male in 2009 while they accounted for 86% of suicide deaths in 2010. The distribution of male and female deaths was approximately even for both homicides in 2009 and undetermined cases in 2010.



Child Deaths by Manner and Age

Child Deaths by Manner and Age, 2009								
	N	%	< 1 month	1- 12 months	1- 5 years	6- 10 years	11- 15 years	16- 17 years
Accident	25	34	1	2	14	3	1	4
Homicide	11	15			2	2	1	6
Suicide	10	13					4	6
Traffic	15	20			5	1	6	3
Undetermined	13	18	4	7	1		1	

Child Deaths by Manner and Age, 2010								
	N	%	< 1 month	1- 12 months	1- 5 years	6- 10 years	11- 15 years	16- 17 years
Accident	27	33	1	5	14	2	3	2
Homicide	22	27	2	4	6	3	1	6
Suicide	7	9				1	3	3
Traffic	7	9	1		3		1	2
Undetermined	18	22	2	15	1			

Accident was the leading manner of death for children 1 - 5 years of age in 2009 followed by undetermined deaths among children 1 - 12 months. The undetermined manner was also the greatest mode among infants less than one month of age. Suicide and homicide were the major manners of death for teens 16 - 17 years of age. Traffic was the leading manner of death for children 11– 15 years of age followed by suicide.

Accident was also the leading manner of death for children 1– 5 years of age in 2010. Undetermined was the leading manner of death for infants 1 - 12 months of age. Over half of homicide deaths occurred among children 5 years and under. A vast majority (86%) of suicide deaths occurred among youth 11– 17 years of age; however, homicide was the leading manner of death for teens ages 16 - 17.

Child Deaths by Manner and Race/Ethnicity

Child Deaths by Manner and Race/Ethnicity, 2009							
	N	%	Accident	Homicide	Suicide	Traffic	Undetermined
Asian							
Black	10	14	2	2		3	3
Hispanic	36	49	13	7	4	8	4
White	24	32	9	2	5	3	5
Other	3	4			1	1	1
Unknown	1	1	1				

Accident and traffic deaths (unintentional injuries) were the largest number of deaths across nearly all races. A greater percentage of deaths occurred among Hispanics than any other race. This was followed by Whites and Blacks. Suicide deaths appear to be concentrated among Hispanics and Whites while Homicides were concentrated among Hispanics in 2009.

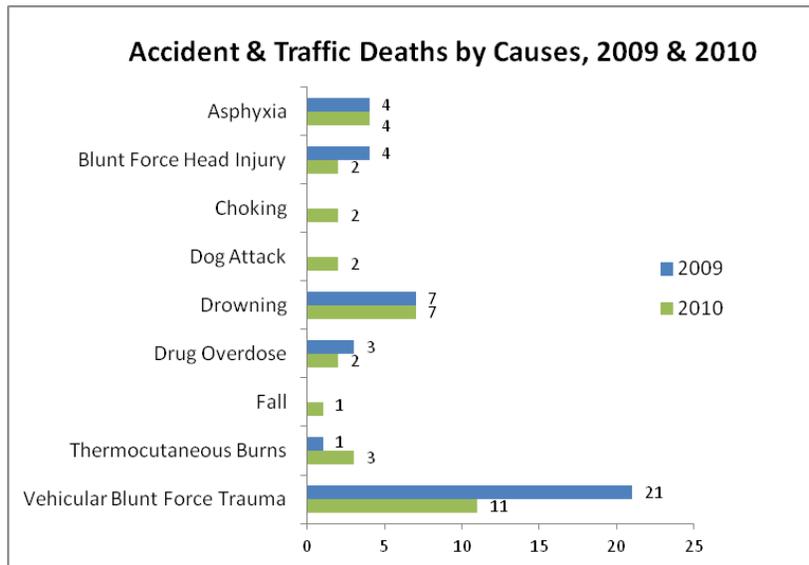
Child Deaths by Manner and Race/Ethnicity, 2010							
	N	%	Accident	Homicide	Suicide	Traffic	Undetermined
Asian	2	3	2				
Black	19	23	2	10	2		5
Hispanic	35	43	11	9	4	6	5
White	21	26	10	3	1	1	6
Other	4	5	2				2

Accident and undetermined deaths were the most common manners of death across all races; however, a majority of accident deaths were concentrated amongst Hispanics and Whites in 2010. Undetermined deaths were almost evenly distributed across Blacks, Hispanics, and Other. Homicide deaths were most common among Black and Hispanic children. The majority of suicide deaths occurred among Hispanic children in 2010.

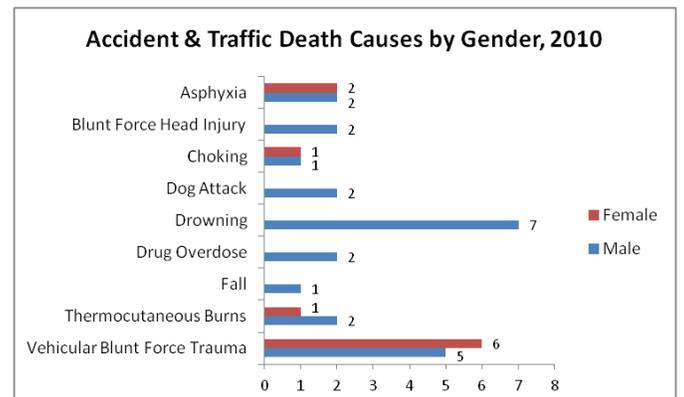
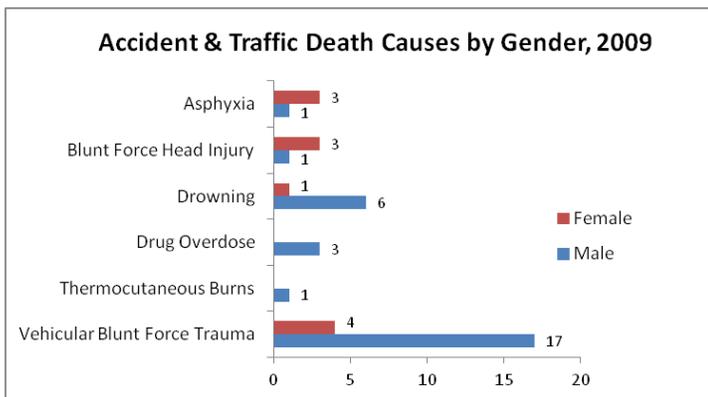
Causes of Death by Manner: 2009 and 2010

Accident & Traffic Deaths

In 2009, there were 40 children's deaths that were classified as accident and traffic in manner within San Bernardino County. Moreover, in 2010 there were 34 children's deaths of the same manner .



The leading cause of death for both years was due to motor vehicle-related (vehicular blunt force trauma) incidents. These incidents accounted for 53% of accident and traffic-related deaths in 2009 and 32% of accident and traffic-related deaths in 2010. The second-leading cause of death for both years was drowning.



Although there was the same number of asphyxia deaths in both years, there were more females in 2009 than in 2010. Both years saw a majority of drowning deaths occur amongst male children. Deaths due to drug overdoses also occurred only amongst male teens both years. Male motor vehicle incident-related deaths far outnumbered female deaths in 2009; however, remained fairly even in 2010.

Accident & Traffic Death Causes by Age, 2009								
	N	%	< 1 month	1-12 months	1-5 years	6-10 years	11-15 years	16-17 years
Asphyxia	4	10		2	1	1		
Blunt Force Head Injury	4	10			2	1	1	
Drowning	7	17			7			
Drug Overdose	3	7						3
Thermocutaneous Burns	1	3			1			
Vehicular Blunt Force Trauma	21	53	1		8	2	6	4

Accident & Traffic Death Causes by Age, 2010								
	N	%	< 1 month	1-12 months	1-5 years	6-10 years	11-15 years	16-17 years
Asphyxia	4	12		4				
Blunt Force Head Injury	2	6			1		1	
Choking	2	6			2			
Dog Attack	2	6			2			
Drowning	7	20			6	1		
Drug Overdose	2	6					1	1
Fall	1	3				1		
Thermocutaneous Burns	3	9		1	2			
Vehicular Blunt Force Trauma	11	32	2		4		2	3

In 2009, 55% (22 cases) of accident and traffic-related deaths were amongst children ages 0 - 5 with drowning and motor vehicle incident-related (vehicular blunt force trauma) deaths being the leading causes. The following year, 71% (24 cases) of unintentional injury deaths were among children ages 0 - 5. Again, both drowning and motor vehicle-related incidents were the leading causes. It is worth noting that all deaths due to dog attacks and choking also occurred among children under age 5.

Almost half of motor vehicle incidents occurred among teens during both years. All deaths due to drug overdoses were also amongst teens in 2009 and 2010.

Special Topics: Drowning Deaths, 2009 - 2010

A total of 14 deaths occurred as a result of drowning in 2009 (7 cases) and 2010 (7 cases). During both years, the majority of deaths occurred in an above-ground or in-ground pool. In fact, 6 of the 7 drownings in 2009 and 5 of the 7 drownings in 2010 occurred in a pool. Most caregivers had last seen their child approximately 10 minutes before finding their child floating in a body of water. The following is descriptive data about the children who died by drowning:

2009...

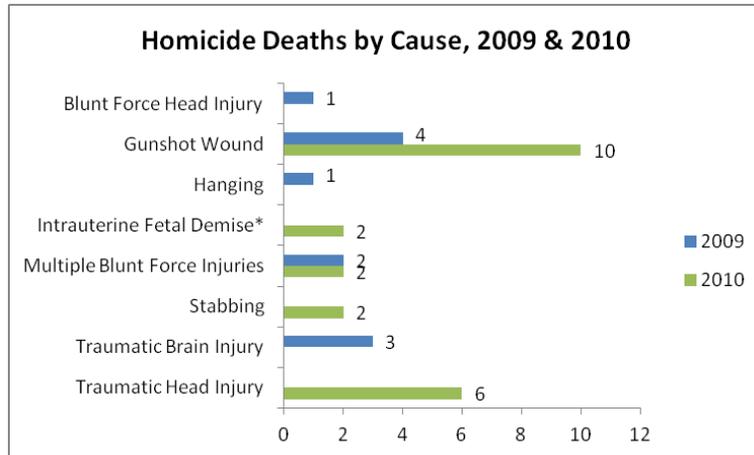
- Six of the 7 children were male. One was female
- All 7 children were between the ages of 1 - 5 years old
- Three children were Hispanic, three children were White, and one was unknown
- Deaths occurred in Barstow, Fontana, Hesperia (2), Ontario, Redlands, and Yucaipa

2010...

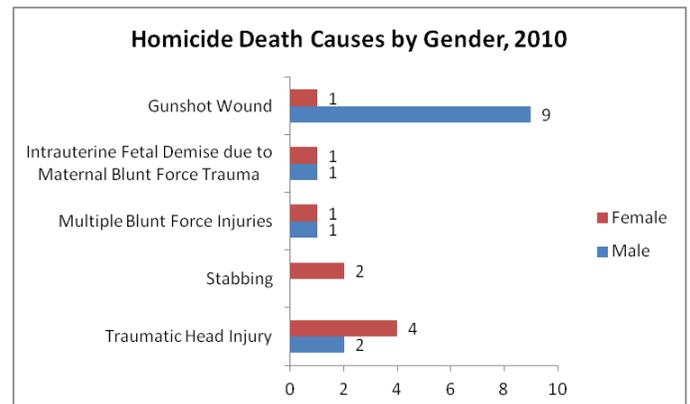
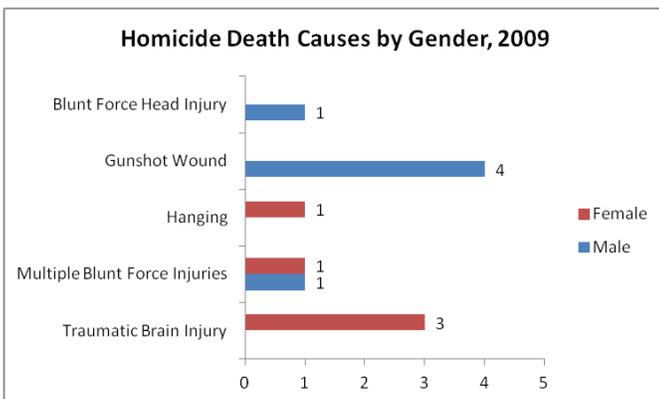
- All 7 children who died by drowning were male
- Six of the 7 children were between the ages of 1 - 5 years old. One child was between 6 - 10 years old
- Three children were Hispanic, three children were White, and one was Asian
- Deaths occurred in Apple Valley, Highland, Rialto, San Bernardino (3), and Rancho Cucamonga

Homicide Deaths

Homicide deaths varied greatly between 2009 and 2010. There were 11 children's homicide deaths in 2009 while there were 22 in 2010 within the County of San Bernardino.



Children's homicide deaths were almost evenly distributed across cause categories in 2009. About 36% of these cases were due to gunshot wounds, while 27% of cases were due to traumatic head injuries. In 2010, there were twice as many children's homicide deaths as there were in 2009. The leading cause of homicide deaths in 2010 was gunshot wound, accounting for 45% of deaths. This was followed by 6 deaths that were due traumatic head injuries. Two deaths in 2010 were ruled a homicide and given a cause of intrauterine fetal demise because of maternal blunt force trauma. That year there were also two deaths that were due to stabbing.



Homicide deaths were distributed across five different causes in 2009. The leading cause of death that year was gunshot wound, which occurred among 4 males. Traumatic brain injury was the second leading cause of death and was most prevalent among females. Overall, homicide deaths occurred as often among females as they did among male.

In comparison to 2009, there was an increase of gunshot wound deaths by 150% in 2010. An overwhelming majority of these deaths were among males (9 of 10 cases). Traumatic head injuries was more common among females than males. Intrauterine fetal demise cases and deaths due to multiple blunt force injuries were evenly distributed across both genders.

In 2009, 55% (6 cases) of homicide deaths were among teens ages 16 -17. A majority of these youth died by gunshot wound while one was by multiple blunt force injuries. Traumatic brain injury homicide deaths was most common among children under age 10.

	N	%	< 1 month	1-12 months	1-5 years	6-10 years	11-15 years	16-17 years
Blunt Force Head Injury	1	9						1
Gunshot Wound	4	37						4
Hanging	1	9				1		
Multiple Blunt Force Injuries	2	18					1	1
Traumatic Brain Injury	3	27			2	1		

In 2010, only 27% (6 cases) of the 22 homicide deaths were among teens ages 16 -17. In fact, over half of homicide deaths (12 cases) were among children ages 0 - 5. Of those, traumatic head injury was the most common

	N	%	< 1 month	1-12 months	1-5 years	6-10 years	11-15 years	16-17 years
Gunshot Wound	10	46		1	1	3	1	4
Intrauterine Fetal Demise	2	9	2					
Multiple Blunt Force Injuries	2	9			2			
Stabbing	2	9						2
Traumatic Head Injury	6	27		3	3			

Special Topics: Child Abuse and Neglect Deaths, 2009 - 2010

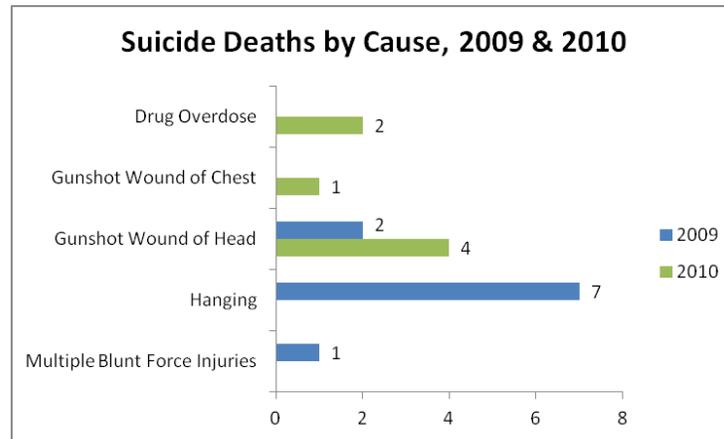
Every year, a number of children die in San Bernardino County from child abuse and neglect. In 2009, four children died due to abuse. This number more than doubled to 11 children in 2010. Overall, 80% of homicide deaths resulting from child abuse are among children ages 0 - 5 for both years. As noted earlier, traumatic head and brain injuries were the most common causes among children in this age range.

AGE	GENDER	RACE	CAUSE OF DEATH
1	Female	Hispanic	Traumatic Brain Injury
3	Female	Hispanic	Traumatic Brain Injury
7	Female	White	Traumatic Brain Injury
7	Female	White	Hanging

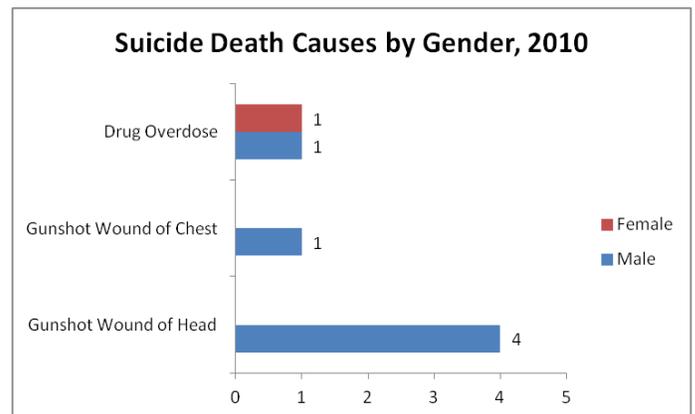
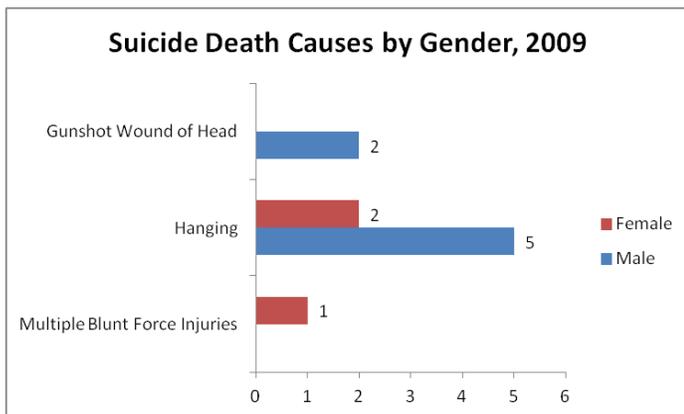
AGE	GENDER	RACE	CAUSE OF DEATH
2 months	Male	Black	Traumatic Head Injury
4 months	Female	Hispanic	Traumatic Head Injury
4 months	Male	Black	Traumatic Head Injury
9 months	Male	White	Gunshot Wound
1	Female	Hispanic	Multiple Blunt Force Injuries
1	Female	Black	Traumatic Head Injury
1	Female	White	Traumatic Head Injury
2	Male	Black	Multiple Blunt Force Injuries
4	Male	Hispanic	Gunshot Wound
5	Female	Hispanic	Traumatic Head Injury
9	Male	White	Gunshot Wound

Suicide Deaths

Every year, a number of children die by suicide in San Bernardino County. In 2009, there were 10 children that died by suicide while in 2010 there were seven.



Deaths by suicide had varying causes during both years. In 2009, the overwhelming majority (70%) of youth died by hanging themselves. Another 20% died by a gunshot wound to the head followed by an additional 10% from multiple blunt force injuries. The next year had a greater distribution across three different causes. Approximately 57% (4 cases) of youth died as a result of a self-inflicted gunshot wound to the head in 2010. Unlike in 2009, two (29%) youth died from a drug overdose and another from a gunshot wound to the chest.

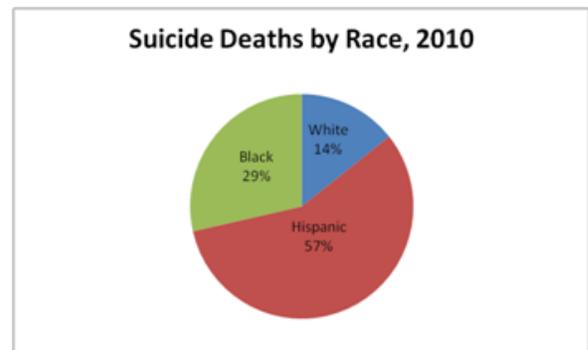
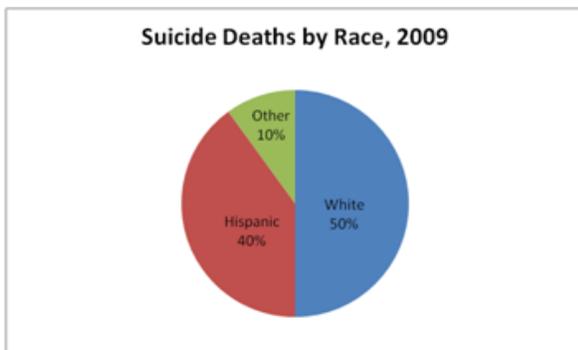


During both years, suicide deaths were more common among males than females. Seventy percent of deaths in 2009 were among males while 30% were among females. Hanging was the most common method youth chose, especially among males. Males comprised 86% of suicide deaths in 2010. Specifically, 100% of gunshot wounds of the head occurred among males. Drug overdoses were evenly distributed between males and females in 2010.

Suicide Death Causes by Age, 2009								
	N	%	< 1 month	1-12 months	1-5 years	6-10 years	11-15 years	16-17 years
Gunshot Wound of Head	2	20					2	
Hanging	7	70					2	5
Multiple Blunt Force Injuries	1	1						1

Suicide Death Causes by Age, 2010								
	N	%	< 1 month	1-12 months	1-5 years	6-10 years	11-15 years	16-17 years
Drug Overdose	2	29						2
Gunshot Wound of Chest	1	14					1	
Gunshot Wound of Head	4	57				1	2	1

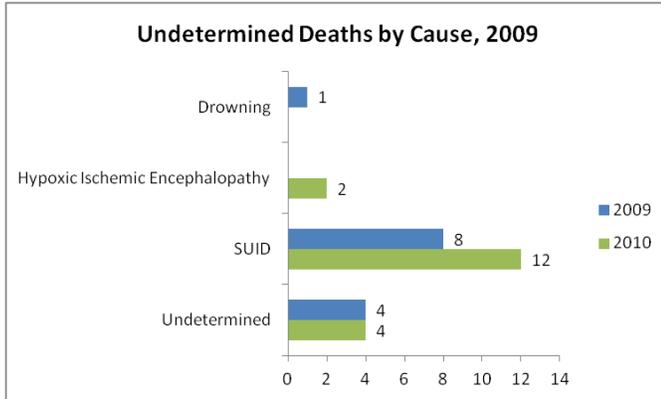
Notably, all suicide deaths occurred among youth ages 11 - 17 in 2009. Sixty percent of suicide deaths that year occurred among youth 16 – 17 years of age with a majority of deaths being a result of hanging. Forty percent of deaths were among youth ages 11 - 15, which were split evenly between gunshot wound of the head and hanging as the causes. In 2010, a majority of deaths (86%) occurred among youth over 11 years age. The number of cases were distributed equally across the 11 - 15 and 16 - 17 age categories. Both cases of drug overdose occurred among youth in the older age category. Gunshot wound of the head was the most common cause of suicide death across all three age categories.



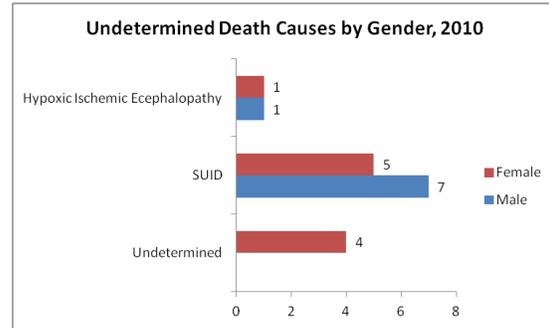
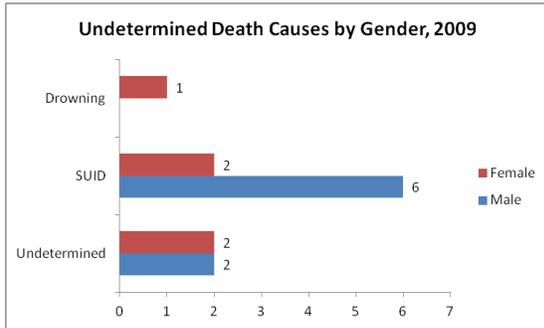
Half of all suicide deaths among San Bernardino County children were White, while 40% were Hispanic, and 10% were Other in 2009. In contrast, 57% of children who died by suicide in 2010 were Hispanic, 27% were Black, and only 14% were White.

Undetermined Deaths

A total of 13 deaths occurred in 2009 in an undetermined manner whereas in 2010 there were 18 deaths.



In 2009, a majority of the undetermined deaths were assigned the cause of Sudden Unexplained Infant Death, and accounted for 62% of deaths that year. One death was due to drowning, however, the manner remained undetermined. The remainder of deaths that year were due to an undetermined cause after a thorough investigation. In 2010, 67% of undetermined manner deaths were due to Sudden Unexplained Infant Death while 22% were due to an undetermined cause. The remaining 11% of deaths were due to hypoxic ischemic encephalopathy. Clearly, Sudden Unexplained Infant Death was the most common cause of death across both years.



Sudden Unexplained Infant Death was much more common among males than females in 2009. In fact, 75% of male undetermined deaths in 2009 were due this cause. Gender distribution was even for deaths that had an undetermined causes. In contrast, deaths with an undetermined cause in 2010 were all among females. The undetermined cause was also the second leading cause of death. Sudden Unexplained Infant Death was the leading cause of death for males and females that year too.

	N	%	< 1 month	1-12 months	1-5 years	6-10 years	11-15 years	16-17 years
Drowning	1	8		2				
SUID	8	61	2	10				
Undetermined	4	31		3	1			

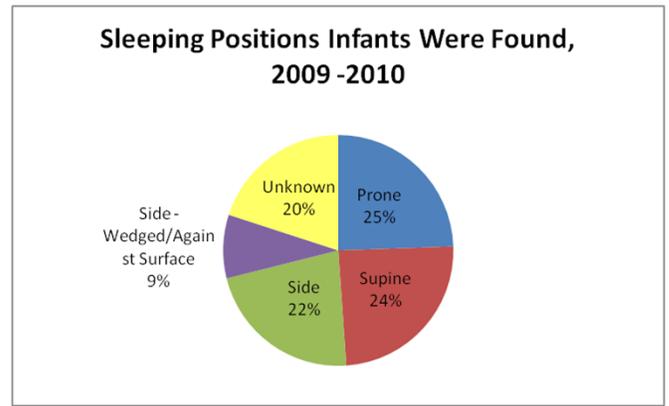
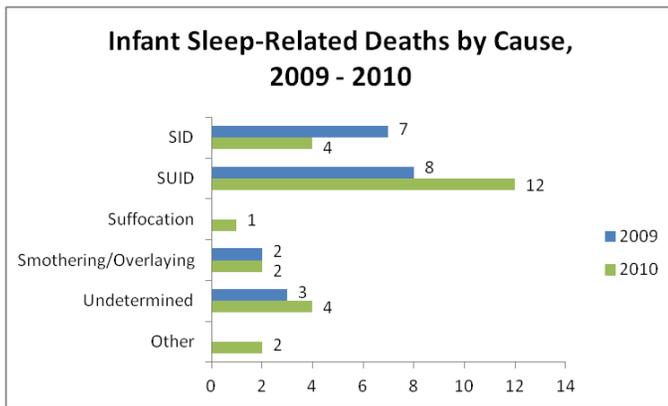
	N	%	< 1 month	1-12 months	1-5 years	6-10 years	11-15 years	16-17 years
Hypoxic Ischemic Encephalopathy	2	11		2				
SUID	12	67	2	10				
Undetermined	4	22		3	1			

It is noteworthy that all undetermined death occurred among children ages 0 - 5 in both 2009 and 2010. An overwhelming majority of those deaths occurred among infants under 12 months. Sudden Unexplained Infant Death was assigned as the cause for all deaths that were among infants under one month of age. It was also the cause for most infants under 12 months .

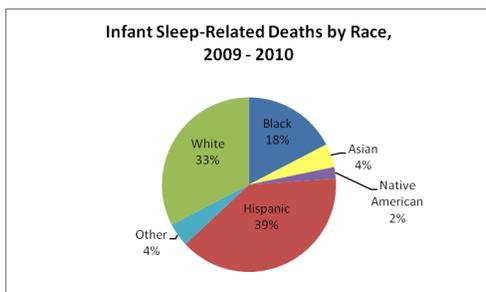
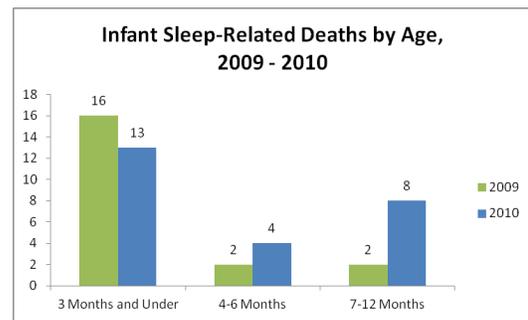
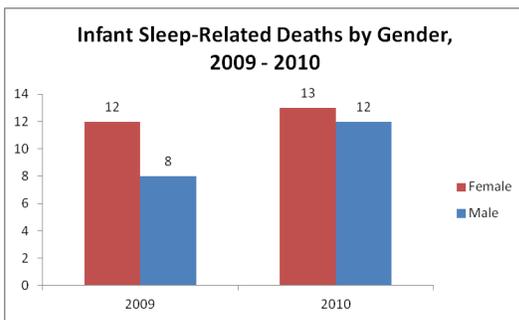
Special Topics: Infant Sleep-Related Deaths, 2009 - 2010

Between 2009 and 2010, 45 infants were found unresponsive in their sleep environments and subsequently died within San Bernardino County. Approximately 67% of these infants were known to have been bed/space sharing with a parent or family member. More specifically, 77% of these bed/space sharing circumstances involved sleeping with one or more parent. Sleeping locations for bed sharing cases during both years included the bed, on top of a pillow on the bed, a parent's chest or arm, couch, recliner, and the floor. Note: The cases included in this study includes deaths across multiple manners including natural manner deaths.

Infant Sleep Related Deaths and Bed-Sharing Cases, 2009 - 2010			
YEAR	Infant Sleep-Related Deaths	Bed Sharing Cases	Bed Sharing Cases w/ One or More Parent
2009	20	14	12
2010	25	16	11
TOTAL	45	30	23



Below are demographic data that describes the 45 infants who were found unresponsive in their sleep environments and subsequently died between 2009 and 2010.



East Valley/Central Region	19
West End	4
High Desert	17
East Desert	3
Mountains	2



Prepared by Children's Network using Child Death Review Team records and 2009 - 2010
Coroner Case Management System data; August 2012.