CPPP Center for Public Policy Priorities

Policy Page

December 16, 2009 Contact: Jane Burstain, burstain@cppp.org No. 09-427

CHILD ABUSE AND NEGLECT DEATHS IN TEXAS

Recently, a spotlight has been focused on deaths from child abuse and neglect in Texas.[1] Texas does have a higher death rate per capita compared to other states. The exact reasons for the higher rate are difficult to determine but seem to be related to two factors. First, other states may be undercounting their child abuse and neglect deaths. Second, Texas probably has a larger number of child abuse and neglect deaths per capita related to the difficult circumstances families face in Texas, specifically high child poverty, a high teen birth rate, and low child abuse and neglect prevention.[2]

Compared to Other States, Texas Has a Higher Rate of Child Deaths from Abuse and Neglect[3]

As illustrated in Figure 1 below, for the last decade Texas consistently had a significantly higher rate of child deaths from abuse and neglect compared to the average rate for other states.[4]

One might suppose that Texas has a greater rate of child deaths overall and that translates into a higher rate of child abuse and neglect deaths as well. As illustrated in Figure 2 on the next page, however, Texas generally tracks the average of the other states on this measure.[5] Moreover, unlike the trend for child abuse and neglect deaths, the overall child death rate has been declining in Texas.

Figure 1

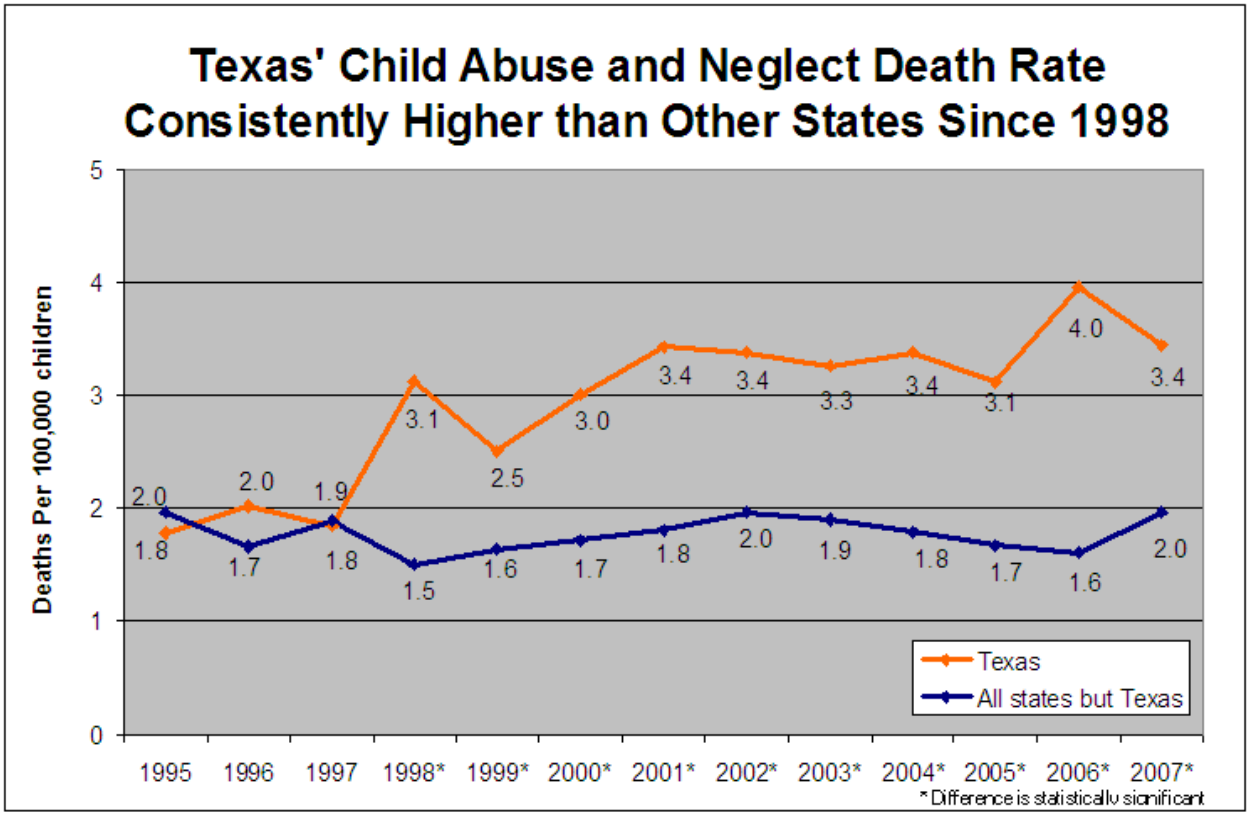
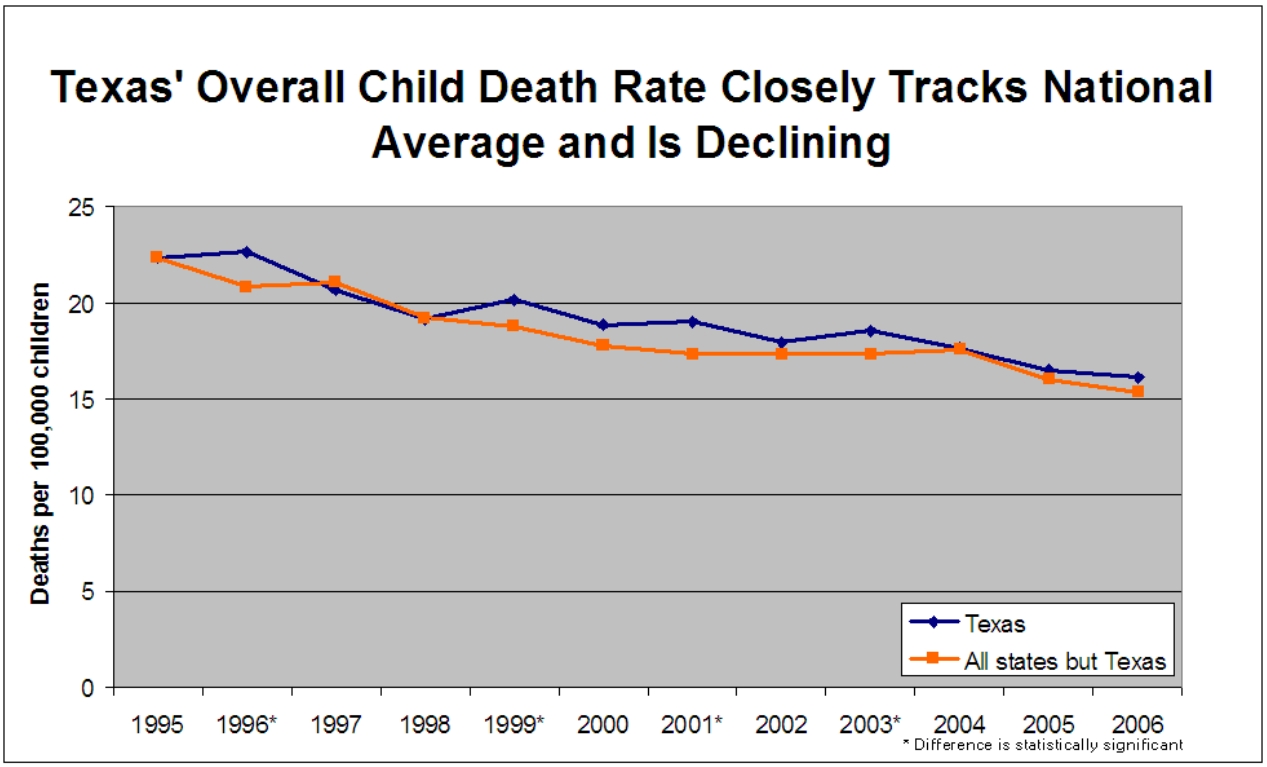


Figure 2



Texas' Higher Child Abuse and Neglect Death Rate Started in 1998, the Same Time as Changes to How Such Deaths Were Identified.

Texas' child abuse and neglect death rate first departed from the average for other states in 1998 with a dramatic increase in the number of reported child abuse and neglect deaths. As illustrated in Figure 3 on the next page, in 1997 there were 103 reported deaths from child abuse and neglect and this jumped to 176 in 1998—an increase of almost 75 percent.[6] No other state had a similar experience, suggesting that the increase was not due to any national change.

It seems highly unlikely that 75 percent more children died in Texas from abuse and neglect in 1998 as compared to 1997, especially as the overall child death rate declined during that time. Instead, it seems likely that the increase was from a classification change. In other words, something happened in 1998 so that deaths that had previously been identified as accidental, unintentional, or expected would now be identified as abuse or neglect.

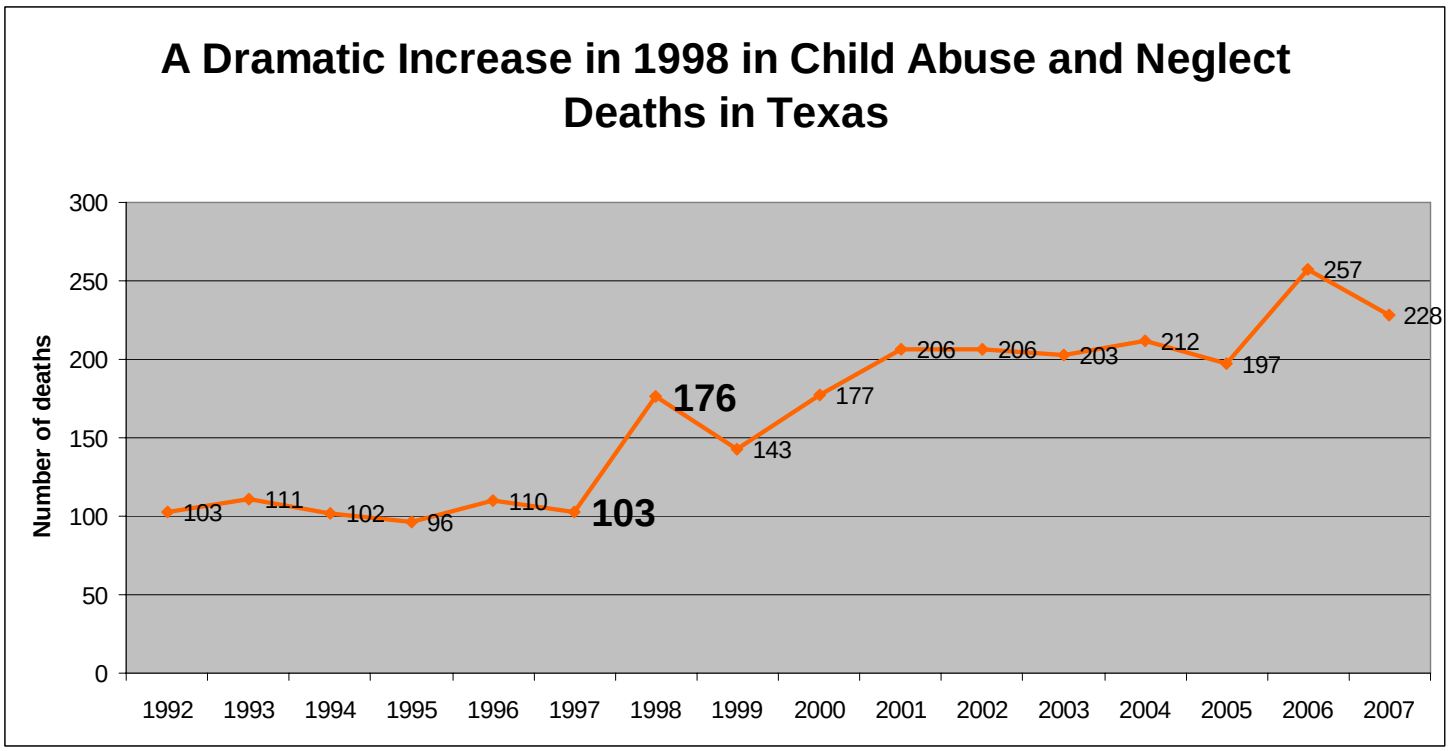
Two legislative changes effective in state fiscal 1998 may account for the change. Staring in state fiscal 1998, the inquests required for deaths to children under the age of 6[7] were expanded to include a determination of whether there was abuse or neglect.[8] At the same time, the legal definition of abuse was expanded to include parental drug use that results in harm to the child.[9]

While these changes may explain why Texas' rate jumped in 1998, it is unclear what this means in relation to the average rate for other states. With the changes, Texas may simply be better than other states at identifying and reporting deaths from child abuse and neglect. If so, Texas' higher rate is from an undercounting of child abuse and neglect deaths in other states.

Alternatively, circumstances endemic to Texas may actually lead to more child abuse and neglect deaths per capita compared to other states.

Next, we explore whether one or both of these factors accounts for Texas' higher rate.

Figure 3



Texas' Structure for Identifying Child Abuse and Neglect Deaths Is Related to Its Higher Child Abuse and Neglect Death Rate

To explore whether Texas is more likely than other states to find a child abuse or neglect death, we studied identification and reporting methods for such deaths.

First, we examined the definition of child abuse and neglect. No national standard exists for when a death should be identified and reported as resulting from abuse or neglect. Looking at Texas' legal definition compared other states, a difference does emerge. As discussed above, Texas includes a parent's drug use in its definition of abuse and neglect. Only 16 other states and the District of Columbia (D.C.) have a similar definition.[10]

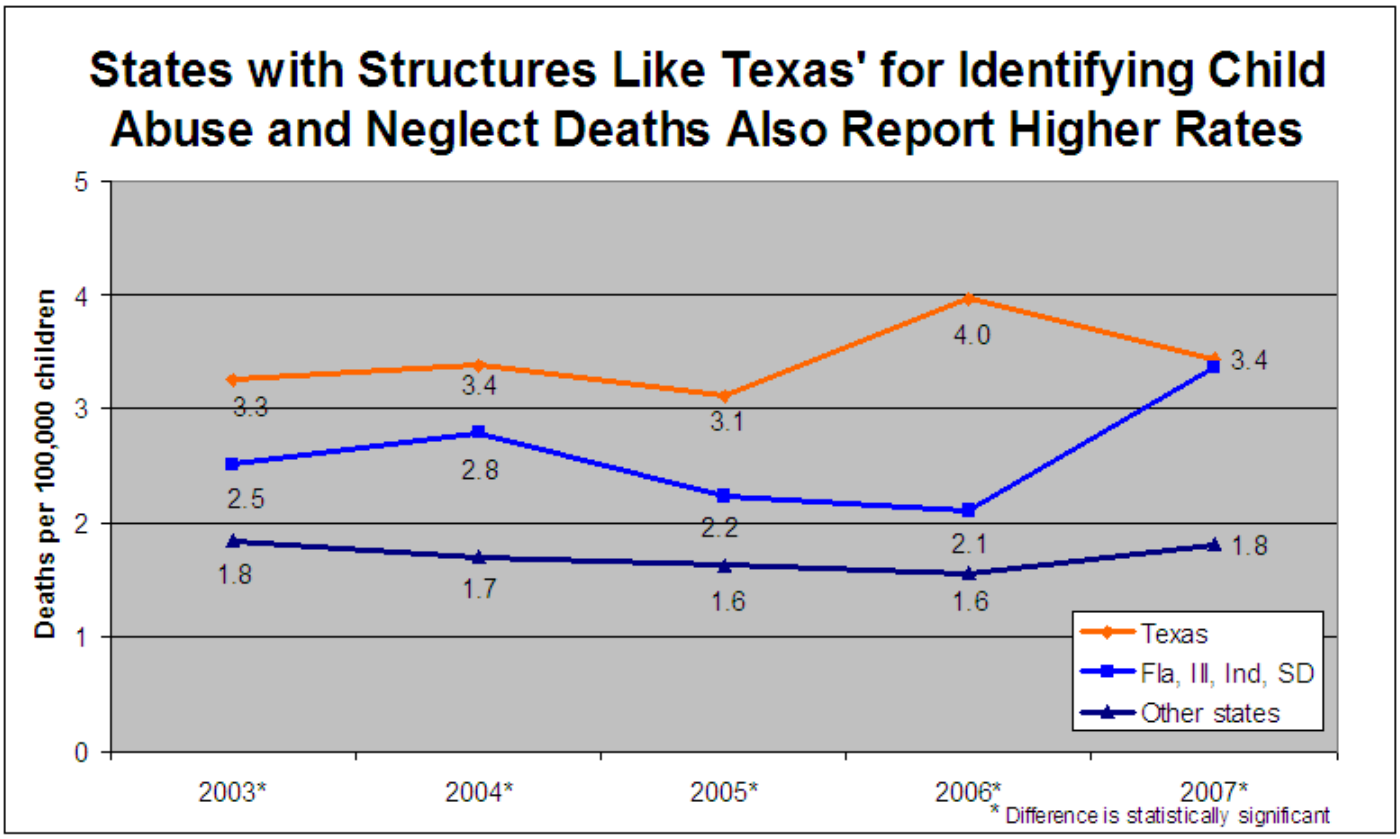
Next, we examined the process for identifying and reporting a child abuse and neglect death. In Texas, all deaths of children under the age of 6 must be reported to the county medical examiner who must conduct an inquest to determine whether the death is from abuse or neglect.[11] Thirty other states and Puerto Rico also have some sort of special reporting procedures for suspicious child deaths.[12]

In addition to the inquest discussed above, Texas also has child fatality review teams that investigate and review child deaths.[13] Although all states have such a process,[14] Texas has local involvement in its child death reviews.[15] Input from the communities in which the deaths occur may allow Texas to more readily identify deaths from abuse or neglect. Thirty other states also have local involvement in their child death review process.[16]

Finally, Texas Child Protective Services (CPS) is a centralized, state-run system. As such, it may be better at identifying and reporting deaths from child abuse and neglect to the federal government as compared to states with a decentralized county-run system.[17] Thirty-seven other states and DC also have state-run CPS systems.[18]

Looking at each characteristic separately, a relatively large number of states are like Texas. But only four other states have all four characteristics: Florida, Illinois, Indiana, and South Dakota. As illustrated in the Figure 4 on the next page,[19] these states also have a higher average death rate as compared to other states.

Figure 4



This suggests that Texas' inclusion of parental drug use in its child abuse definition and its process for identifying and reporting child abuse and neglect deaths may account, in part, for its higher rate. In other words, it provides some evidence that Texas is more likely than other states to identify a child death as resulting from abuse or neglect.[20] If so, it means that other states may be undercounting their child abuse and neglect deaths. For example, a recent *Los Angeles Times* article documented numerous incidences of underreporting in California.[21]

But even if other states underreport, that does not seem to fully explain Texas' higher rate. As illustrated in the graph above, except in 2007,[22] Texas had a higher death rate, even when compared only to states with a similar child death identification process.

Assuming that Texas' higher rate is not solely a function of underreporting in other states, we next explore whether other circumstances endemic to Texas are related to its higher child abuse and neglect death rate.

The Difficult Circumstances Families Face in Texas Are Related to Its Higher Child Abuse and Neglect Death Rate

Families in Texas face difficult circumstances. Texas has a large proportion of its children living in poverty. In 2007, 23 percent of all children in Texas lived in families with an annual income below the federal poverty line.[23] This rate is significantly higher than the 18 percent average for the other states.

Texas also has a high teenage birth rate and, thus, a large number of young mothers. In 2006, 63 of every 1,000 teenaged girls gave birth in Texas compared to a significantly lower average of 42 of every 1,000 teenaged girls in other states.[24]

Texas also consistently has one of the lowest child abuse and neglect prevention rates. In 2007, Texas provided preventative services to about nine of every 1,000 children. The average rate for the rest of the states was more than seven times higher at 67 of every 1,000 children. Only four other states (Florida, Missouri, New Mexico, and North Carolina) had a lower rate than Texas.[25]

Studies have shown that such circumstances are related to child abuse and neglect. Poverty is a consistent predictor of abuse and neglect. Children in families with an annual income of less than $15,000 are 14 times more likely to be abused and 44 times more likely to be neglected as compared to children in families with an annual income of $30,000 or more.[26] Children with young mothers are more likely to suffer fatal child maltreatment.[27] Finally, certain prevention programs have proved effective at reducing child abuse and neglect.[28]

In this section we explore the relationship between these factors and Texas' child abuse and neglect death rate.

States Like Texas with a High Poverty Rate Have a Higher Rate of Abuse and Neglect Deaths[29]

On average, states with a poverty rate at or above 20 percent had almost one additional child death per 100,000 children compared to states with a lower poverty rate.[30]

States Like Texas with a High Teen Birth Rate Have a Higher Rate of Abuse and Neglect Deaths[31]

On average, states with a teen birth rate at or above 53 per 1,000 teenaged girls had almost one additional child death per 100,000 children compared to states with a lower teen birth rate.[32]

States Like Texas with a Low Rate of Child Abuse and Neglect Prevention Coverage Have a Higher Rate of Abuse and Neglect Deaths[33]

The 10 states with the lowest preventative services rate[34] had, on average, almost one additional death per 100,000 children[35] compared to the 10 states with the highest preventative services rate.[36]

Texas' Lower Rate of Intervention Does Not Appear to Be Related to Its Higher Rate of Child Abuse and Neglect Deaths

In addition to family circumstances, CPS' actions may also contribute to Texas' higher death rate. CPS' actions can be separated into two broad categories. The first is intervening in a family's life. CPS actions in this category include investigation of referrals, the decision to provide services, and removal of a child from the home. The second category is the quality of and access to services a family receives after CPS intervenes. Unfortunately, it is difficult to measure and compare across states the quality and quantity of services a CPS system provides. As a result, our analysis will focus on the factors related to intervention.

Texas Has Fewer Abuse and Neglect Reports but a Statistical Analysis Shows No Relationship to Its Child Abuse and Neglect Death Rate

Given that Texas has a high poverty rate, a high teen birth rate, and a low rate of providing prevention services, one would expect that children in Texas would be more likely to be subjected to abuse or neglect. If true, one would expect Texas to have a higher victimization rate as compared to other states. But Texas' victimization rate in 2007 was 11 of every 1,000 children, the same as the average for other states.

There may be instances of abuse or neglect that Texas is not identifying. If so, this may contribute to Texas' higher death rate. If CPS does not identify a problematic situation, it cannot intervene, and the abuse may escalate into a child death.

But CPS investigates a higher than average percentage of the referrals it receives. In 2007, CPS screened in for investigation about 82 percent of all referrals for abuse or neglect while the average screen-in rate for rest of the states was significantly lower at 58 percent.[37] And CPS finds abuse and neglect in the cases it investigates at a rate that is similar to other states. In 2007, CPS confirmed about 25 percent of its investigations, similar to the average of 26

percent for other states. If CPS fails to identify abuse or neglect, it does not appear to be from a lack of investigation. This suggests that if CPS fails to identify abuse and neglect it is because it is not being reported.

Texas has a low rate of reporting child abuse and neglect. In 2007 in Texas, there were 30 referrals for child abuse or neglect for every 1,000 children.[38] The average rate for the rest of the states was significantly higher at about 50 referrals for every 1,000 children.

No legal barriers exist to reporting abuse or neglect. Everyone in Texas is already required to report suspected abuse or neglect.[39] And anyone making a report in good faith is protected from criminal or civil liability even if it turns out no abuse or neglect occurred.[40] Reports can be made anonymously and even if a reporter identifies himself, his identity is kept confidential.[41]

Multiple ways exist to report abuse or neglect. Through DFPS, a report can be made over the telephone, in-person, by mail or fax or through the internet.[42] Despite the multiple avenues available, however, the vast majority of reports are still made over the telephone and telephone hold times have been increasing. In 2007, hold time was an average of almost 10 minutes.[43]

A lack of awareness about how and when to report abuse or neglect, a cultural reticence to involve government in families' lives or long hold times may all contribute to the lower reporting rate in Texas.

Whatever the reasons for Texas' lower reporting rate, however, a statistical analysis shows no relationship between a state's reporting rate and its child abuse and neglect death rate.[44] This suggests that Texas' lower reporting rate is not related to its higher child abuse and neglect death rate.

Texas Provides Services to Fewer Families but a Statistical Analysis Shows No Relationship to Its Child Abuse and Neglect Death Rate

As compared to other states, Texas provides services to fewer families with a confirmed case of abuse or neglect. In 2007, Texas provided services to about 51 percent of the identified victims of abuse and neglect. The average rate for the other states was significantly higher at 60 percent.[45] The difference in service level is even more pronounced when looking at non-victims (e.g., siblings of the victim). In 2007, Texas provided services to 6 percent of this population while the average for the other states was 29 percent.[46]

Again, though, a statistical analysis shows no relationship between a state's level of service and its child abuse and neglect death rate.[47] This suggests that Texas' lower service rate is not related to its higher child abuse and neglect death rate.

Texas Removes Fewer Children but a Statistical Analysis Shows No Relationship to Its Child Abuse and Neglect Death Rate

As compared to other states, Texas is much less likely to formally remove a child from a parent's custody when there is a confirmed finding of abuse or neglect. In 2007, Texas' removal rate for victims was about 16 percent and for non-victims (e.g., siblings) was less than 1 percent. The average for the other states was significantly higher at 24 percent for victims and about 4 percent for non-victims.[48]

But yet again, a statistical analysis shows no relationship between a state's level of removals and its child abuse and neglect death rate.[49] This suggests that Texas' low removal rate is not related to its higher death rate.

Conclusion

Texas has a higher rate of child abuse and neglect deaths compared to other states. Evidence suggests that, in part, Texas may be better than other states in identifying and reporting child abuse and neglect deaths. If other states are undercounting their child abuse and neglect deaths, it makes Texas' rate look higher.

But evidence also links Texas' higher death rate to its high rate of child poverty, high teen birth rate, and low rate of prevention coverage, meaning Texas actually has more child abuse and neglect deaths per capita.

Poverty and giving birth as a teenager may not directly cause child abuse or neglect deaths. Instead, they are likely part of a complicated inter-relationship between poverty, teen pregnancy and other related factors such as stress, single-parenting, substance abuse and untreated mental illness. But in the end, the exact way in which these factors affect child abuse and neglect may not matter. If reducing poverty and teen pregnancy also reduces the negative effects related to them, then the child death rate would decline.

The relationship between child abuse and neglect prevention and child abuse and neglect deaths may be more direct. But that does not mean that all "prevention" programs are equal. While all prevention programs may mean well, not all have been proven to successfully reduce abuse and neglect. [50]

Surprisingly, the statistical analysis shows no relationship between a state's intervention with a family, as measured by its reporting rate, service rate, or removal rate, and its child abuse and neglect death rate. This may suggest that even in low intervention states like Texas, the most serious cases get reported and CPS responds.

Low quality of and access to services for the families the state supervises may also contribute to Texas' higher death rate. If families do not receive the help they need, they will simply fall back into old patterns and problems once the state terminates its supervision. But, unfortunately, it is difficult to measure quality and access to services for families in the CPS system. As a result, it is impossible to determine where Texas stands in relation to other states and the relationship of this factor to the child abuse and neglect death rate.

There is no easy answer about why Texas has a higher rate of child abuse and neglect deaths. It is a complicated issue affected by a myriad of factors, not all of which can be easily identified and measured. But our analysis suggests that if Texas wants to reduce the number of deaths from child abuse and neglect, efforts to reduce poverty and teen births and expand access to proven prevention programs is the place to start.

[1] *We Can Do Better: Child Abuse and Neglect Deaths in American.* Every Child Matters education fund. Washington D.C. 2009. Available at: http://www.texprotects.org/site/DocServer/wcdb_report.pdf?docID=1461. Accessed on December 16, 2009. *Review: CPS Missed Warning Signs.* Terri Langford. Houston Chronicle. December 15, 2009. *Child Protective Services Operational and Management Review, Region 6 (Houston area).* Department of Family and Protective Services. December 14, 2009. Available at: http://www.dfps.state.tx.us/documents/about/pdf/2009-12-14_Region6Report%20.pdf. Accessed on December 15, 2009.

[2] Due to the small sample size for each individual year, unless otherwise noted, in our statistical analysis we used indicator variables rather than the actual rates for the independent variables. A p-value of .05 was used to determine statistical significance. Unless otherwise noted, the rate for other states is an average rather than a weighted rate. Unless otherwise noted, all differences discussed are statistically significant. But establishing a statistically significant relationship between two variables does not necessarily establish that one variable causes the other. Conversely, a lack of a statistically significant relationship between two variables does not necessarily mean that they are not related. In either case, it may be that there that the variable of interest is confounded with something else that is masking the true relationship.

[3] Unless otherwise noted, all data is from *Child Maltreatment*, an annual publication that the Administration on Children and Families (ACF) compiles from state provided data. It is unlikely that every state uses the exact same definition or procedure in reporting its data to ACF. But looking at the states in the aggregate should help control for some of the differences. Data is not available for every state on every measure. We note when data is missing for more than five states. If the missing data is significantly different from the average for states with data, the analysis and resulting conclusions could be different.

[4] Death data from certain states is consistently missing. No data exists for Michigan from 2001 to 2007 and 1995 to 1997. We lack data from North Carolina from 2003 to 2007. No data exists for Puerto Rico prior to 2005. There is no data from Alaska from 1995 to 1998. In 1997, data is missing from Alaska, Connecticut, Delaware, Iowa, Michigan, North Dakota, New York, Ohio, Puerto Rico, South Carolina and West Virginia. In 1996, data is missing from Alaska, Connecticut, DC, Maryland, Michigan, Ohio, Puerto Rico, Washington and West Virginia. In 1995, data is missing from Alaska, Maryland, Michigan, Ohio, Puerto Rico and West Virginia.

[5] The number of overall child deaths was obtained from the Annie E. Casey KIDS COUNT database. Available at: http://datacenter.kidscount.org/data/acrossstates/Rankings.aspx?ind=22. Accessed on November 19, 2009.

[6] The data from 1995 through 2007 is from *Child Maltreatment.* The data from 1992 to 1994 comes from *Child Abuse and Neglect Related Deaths In Texas and the Nation.* Available at: http://www.dfps.state.tx.us/Documents/Child_Protection/pdf/chldstdy.pdf. Accessed on November 19, 2009.

[7] Texas Family Code §264.514.

[8] 75th Legislature: SB 359.

[9] 75th Legislature: HB 1826.

[10] Arkansas, Colorado, Florida, Illinois, Indiana, Minnesota, North Dakota, South Carolina, South Dakota, Virginia and the District of Columbia include pre-natal drug exposure in their definition of abuse and neglect. California, Iowa, Kentucky, Minnesota, New York, Rhode Island and Texas include a parent's drug use in the definition of abuse and neglect to the extent it impairs the ability to care for the child. *Parental Drug Use as Child Abuse.* Child Welfare Information Gateway. May 2009. Available at: http://www.childwelfare.gov/systemwide/laws_policies/statutes/drugexposed.cfm. Accessed on December 1, 2009

[11] Texas Family Code §§264.513-14.

[12] In addition to Texas, Arkansas, California, Colorado, Connecticut, Florida, Illinois, Indiana, Kansas, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nevada, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Virginia, Washington, West Virginia, Wisconsin, Wyoming and Puerto Rico all have special reporting procedures for suspicious child deaths. *Making and Screening Reports of Child Abuse and Neglect*. Child Welfare Information Gateway. Current Through January 2009. Available at: http://www.childwelfare.gov/systemwide/laws_policies/statutes/repproc.pdf. Accessed on November 20, 2009.

[13] Texas Family Code §264.501 et. seq.

[14] Idaho does not currently have a working program. National MCH Center for Child Death Review, State Spotlight-Idaho. Last updated February 2008. Available at: http://www.childdeathreview.org/spotlightID.htm. Accessed on November 10, 2009. Prior to 2007 DFPS and the Department of State Health Services (DSHS) shared responsibility for the child fatality review program. In 2007 responsibility was completely transferred to DSHS.

[15] Reviews are conducted at the local level with the state developing model protocols for reporting and investigating child deaths, data collection and training for review teams. National MCH Center for Child Death Review, State Spotlight-Texas. Last updated April 2008. Available at: http://www.childdeathreview.org/spotlightTX.htm. Accessed on November 10, 2009.

[16] Using state program descriptions from the National MCH Center for Child Death Review, State Spotlights (Available at: http://www.childdeathreview.org/state.htm. Accessed on November 10, 2009), the variable for local involvement was an indicator with a 1 meaning that the child death review process had some local involvement and a 0 meaning that the process was conducted solely at the state level. Local involvement is defined as reviews conducted solely at a local level, reviews conducted at both the state and local level and reviews conducted at a local level with state oversight. States with local involvement include: Alabama, Arizona, California, Colorado, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Missouri, Montana, Nevada, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Texas, Vermont, Virginia, Washington, Wisconsin and Wyoming.

[17] Based on information provided by DFPS, DFPS is the agency that makes the determination about whether a death is reported as abuse or neglect to the federal government.

[18] 13 states have a county-administered system: California, Colorado, Georgia, Maryland Minnesota, Nevada, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Virginia and Wisconsin. *National Study of Child Protective Services Systems and Reform Efforts: Review of State CPS Policy.* U.S. Department of Health and Human Services Office of the Assistant Secretary for Planning and Evaluation and Administration for Children and Families Administration on Children, Youth and Families Children's Bureau. April 2003. Available at: http://aspe.hhs.gov/hsp/cps-status03/state-policy03/index.htm. (Accessed on October 30, 3009).

[19] The analysis assumes that the designations for the individual states remained the same in the time periods shown.

[20] The relationship could flow the opposite way. In other words, it is possible that states with a higher rate of child abuse and neglect deaths adopted an expanded definition of child abuse and a comprehensive system for identifying and reporting such deaths in an attempt to address the problem. But no evidence suggests this happened in Texas. When Texas expanded its abuse definition and required the medical examiner to look for abuse and neglect, Texas did not have a significantly higher death rate.

[21] *California falls short in examining deaths of children.* Kim Christensen and Garrett Therolf. Los Angeles Times. November 5, 2009. Available at: http://mobile.latimes.com/inf/infomo?view=page7&feed:a=latimes_1min&feed:c=localnews&feed:i=50295671&nopaging=1. Accessed on December 2, 2009.

[22] The 2007 rate for the four states with Texas' characteristics may be skewed by South Dakota. South Dakota has a relatively small child population so that a small increase in the number of deaths has a fairly large impact on its rate. South Dakota had 1 death in 2006 with a rate of .51 and 8 deaths in 2007 with a rate of 4.06. But the increase may simply be a random fluctuation. For example, it may be that in 2007, deaths occurred in 1 or 2 families with a large number of children.

[23] Annie E. Casey Kids Count Data Center. Available at: http://datacenter.kidscount.org/data/acrossstates/Rankings.aspx?ind=45 (Accessed on October 30, 2009).

[24] Ages 15-19. Annie E. Casey Kids Count Data Center. Available at: http://datacenter.kidscount.org/data/acrossstates/Rankings.aspx?ind=2 (Accessed on October 30, 2009).

[25] Data was missing from 14 states: Alabama, Connecticut, Hawaii, Idaho, Kentucky, Maryland, Massachusetts, Michigan, North Dakota, Oregon, South Carolina, Tennessee, West Virginia and Wisconsin.

[26] Sedlack AJ, Broadhurst DD. *Executive Summary of Third National Incidence Study of Child Abuse and Neglect.* Administration of Children and Families. 1996. Available at: http://www.childwelfare.gov/pubs/statsinfo/nis3.cfm#top. (Accessed on October 30, 2009).

[27] Stiffman NM, et al. *Household Composition and Risk of Fatal Child Maltreatment.* Pediatrics 109(4):615-621. April 2002.

[28] *States Using Evidence-Based Methods to Prevent Child Abuse.* National Conference of State Legislators. Public Health News. 2004. Available at: http://www.ncsl.org/print/health/preventabuse.pdf. Accessed on December 1, 2009.

[29] Based on an ordinary least squares regression of poverty on the child death rate. Using data from 2007, poverty was defined as an indicator with 1 meaning that a state had a rate at or above the 75th percentile.

[30] $\beta = .74$. The same effect was found using an indicator for states at or above the 75th percentile for: (1) children in extreme poverty (defined as an annual income of 50% or less than the federal poverty line) $\beta = .80$; and (2) children under 5 living in poverty $\beta = .80$.

[31] Based on an ordinary least squares regression of the teen birth rate on the child death rate. Using data from 2006, teen birth rate was defined as an indicator with 1 meaning that a state had a rate at or above the 75th percentile.

[32] $\beta = .87$.

[33] Based on an ordinary least squares regression of prevention regressed on the child death rate. Using data from 2007, prevention was an indicator variable with 1 meaning that a state had a rate at or below the 25th percentile and 0 meaning that a state had a rate at or above the 75th percentile.

[34] Alaska, Florida, Illinois, Indiana, Maine, Missouri, New Mexico, Ohio, Pennsylvania and Texas. North Carolina was in the bottom 10 for preventative services but did not provide a death rate. So Alaska, which was the 11th worst state for preventative services, was used instead.

[35] $\beta = .886$.

[36] Georgia, Iowa, Minnesota, Mississippi, New Hampshire, New Jersey, Puerto Rico, Utah, Vermont and Wyoming.

[37] Based on a one sample, two-sided t-test. The rate was calculated as follows: the total number of screened-in referrals divided by the total number of referrals. Data was missing for the following states: Connecticut, Hawaii, Idaho, Illinois, Louisiana, Maryland, Michigan, North Carolina, North Dakota, New Jersey, New York, Ohio, Pennsylvania, Puerto Rico and Tennessee.

[38] The rate was calculated as follows: the total number of referrals divided by the total child population then multiplied by 1,000. Data was missing for the following states: Connecticut, Hawaii, Idaho, Illinois, Louisiana, Maryland, Michigan, North Carolina, North Dakota, New Jersey, New York, Ohio, Pennsylvania, Puerto Rico and Tennessee.

[39] Texas Family Code §261.101(a).

[40] Texas Family Code §261.106(a).

[41] Texas Family Code §261.201(a).

[42] DFPS 2008 databook, page 3.

[43] DFPS 2008 databook, page 3.

[44] Based on an ordinary least squares regression of the reporting rate on the child death rate, states with a low reporting rate did not have a higher child abuse and neglect death rate. Using data from 2007, the reporting rate was first defined an indicator with 1 meaning that a state had a rate at or below the 25th percentile. An alternate regression was run with the reporting rate defined as an indicator with a 1 meaning that a state had a rate at or below the 25th percentile and a 0 meaning the state had a rate at or above the 75th percentile. To increase the number of observations, data from 2003 through 2007 was used. There still was no relationship. For states in which data was missing in 2007, see footnote 36. In 2006, data was missing from Hawaii, Illinois, Louisiana, Maryland, Michigan, North Carolina, New Jersey, Ohio and Pennsylvania. In 2005, data was missing from Alaska, Connecticut, Illinois, Louisiana, Maryland, Michigan, North Carolina, North Dakota, Jew Jersey, New York, Ohio, Pennsylvania, and Puerto Rico. In 2004, data was missing from Alaska, Connecticut, Illinois, Louisiana, Maryland, Michigan, North Carolina, North Dakota, New Jersey, New York, Ohio, Pennsylvania, Puerto Rico and Wisconsin. In 2003, data was missing from California, Colorado, Connecticut, Hawaii, Illinois, Louisiana, Maryland, Michigan, North Carolina, North Dakota, New Jersey, New York, Ohio, Pennsylvania, Puerto Rico, Tennessee, Vermont and Wisconsin.

[45] In 2007, data was missing for Alabama, Georgia, Maryland, Massachusetts, Michigan, North Carolina, North Dakota, New York and Oregon. In 2006, data was missing for Georgia, Maryland, North Carolina, North Dakota and New York. In 2005, data was missing for Alabama, Alaska, Georgia, North Carolina, North Dakota, New York and Pennsylvania. In 2004, data was missing from Alaska, North Dakota, New York, Pennsylvania, Puerto Rico, South Dakota and Wisconsin. In 2003, data was missing from California, North Dakota, New York, Pennsylvania, Puerto Rico, South Dakota and Tennessee.

[46] In 2007, data was missing from Alabama, Georgia, Maryland, Massachusetts, Michigan, North Carolina, North Dakota, New York and Oregon. In 2006, data was missing from Georgia, Maryland, Michigan, North Carolina, North Dakota and New York. In 2005, data was missing from Alabama, Alaska, Arkansas, Georgia, Michigan, North Carolina, North Dakota, New York, Oklahoma and Pennsylvania. In 2004, data was missing from Alabama,

Alaska, Michigan, North Carolina, North Dakota, New York, Pennsylvania, Puerto Rico, South Dakota and Wisconsin. In 2003, data was missing from Alabama, California, Louisiana, Michigan, North Carolina, New York, Pennsylvania, Puerto Rico, South Dakota and Tennessee.

[47] Based on an ordinary least squares regression of the services rate for both victims and non-victims on the child death rate, states that had a low service rate did not have a higher child abuse and neglect death rate. Using data from 2007, the services rate for victims was first defined an indicator with 1 meaning that a state had a rate at or below 51.5. An alternate regression was run with the services rate for victims defined as an indicator with a 1 meaning that a state had a rate at or below 51.5 and a 0 meaning the state had a rate at or above the 75th percentile. The services rate for non-victims was first defined an indicator with 1 meaning that a state had a rate at or below the 25th percentile. An alternate regression was run with the services rate for victims defined as an indicator with a 1 meaning that a state had a rate at or below the 25th percentile and a 0 meaning the state had a rate at or above the 75th percentile. To increase the number of observations, data from 2003 through 2007 was used. There still was no relationship.

[48] Data was missing for the following states: Alabama, Georgia, Maryland, Massachusetts, Michigan, North Carolina, North Dakota, New York and Oregon.

[49] Based on an ordinary least squares regression of the removal rate on the child death rate, states with a low removal rate did not have a higher death rate. Using data from 2007, the removal rate was first defined an indicator with 1 meaning that a state had a rate at or below the 25th percentile. An alternate regression was run with the removal rate defined as an indicator with a 1 meaning that a state had a rate at or below the 25th percentile and a 0 meaning the state had a rate at or above the 75th percentile. To increase the number of observations, data from 2003 through 2007 was used. There still was no relationship.

[50] *States Using Evidence-Based Methods to Prevent Child Abuse.* National Conference of State Legislators. Public Health News. 2004. Available at: http://www.ncsl.org/print/health/preventabuse.pdf. Accessed on December 1, 2009.