



An Analysis of Child Deaths and Intact Family Services

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1. Introduction and Purpose

On October 23, 2017, the *Chicago Tribune* published an article entitled “Child deaths spike after DCFS privatizes ‘intact family services.’”¹ The article asserts that 15 children died from abuse or neglect between 2012 and “last year” in homes receiving intact family services from agencies hired by the Illinois Department of Children and Family Services (DCFS) to provide such services to families. According to the Tribune’s investigation, only one child died while receiving intact families services during the previous five year period (2007 – 2011), and the “spike in deaths began in 2012 after DCFS completely privatized the program, putting the care of families in the hands of nonprofit groups but doing little to evaluate the quality of their work, give them guidance and resources, or hold them accountable when children were hurt or put at risk.”

The *B.H.* Expert Panel requested that the Children and Family Research Center (CFRC) conduct an independent analysis to examine the Tribune’s claim that the privatization of intact family services (IFS) was associated with an increase in child deaths due to maltreatment. Specifically, the Expert Panel wanted the CFRC to examine, from the year 2000 until the most recent data available, the number of child deaths that occurred among children receiving IFS as well as among those who received IFS within the 12 months prior to their deaths. In addition, the Expert Panel requested that the deaths associated with IFS be broken out by cases served by DCFS versus those served by private child welfare agencies through purchase of service (POS) contracts, in order to test the hypothesis that the privatization of IFS was associated with an increased risk of child deaths compared to cases served by DCFS.

2. Methods: Sample, Definitions, and Analyses

The sample for the analyses includes all children with screened-in maltreatment reports involving allegations of child death, which includes allegation #1 (death due to abuse) and allegation #24 (death due to neglect). In an attempt to explore the data as fully as possible, two samples were examined: the first sample included *all children with screened-in reports of child death*, regardless of the disposition of the investigation, and the second sample included only those children with *indicated death investigations*. The number of children with allegations of death and indicated allegations of death that occurred in each fiscal year between 2000 and 2017 was calculated.

Since there is no service code that corresponds to the designation of an “Intact Family” case, we define an *intact family case* as a family case in which ALL of the children in the family

¹ <http://www.chicagotribune.com/news/watchdog/ct-dcfs-verna-intact-family-services-met-20171022-story.html>

remain in the home for at least 30 days following the family case opening (in other words, none of the children in the home are placed in substitute care).

To determine which *child deaths occurred during an intact family case*, the file with maltreatment reports was merged with the file containing all family case openings and matched by child ID. Cases were included in this group if the report date of the death allegations occurred after the intact family case opening date and before the intact family case closing date.

To determine which *child deaths had intact family service involvement during the previous 12 months*, the file with maltreatment reports was merged with the file containing all family case openings and match by child ID. Cases were included in this group if the report date of the death allegations occurred within 365 days of a previous intact family case closing date.

There is a table included in the DCFS administrative data that lists the team (i.e., agency) assignment for each intact family case, as well as the dates of any case transfers to a different team. These teams were organized into two larger categories to differentiate between cases assigned to a *DCFS field office or a purchase of service (POS) agency*. The agency assignment at the time of the death report was used for determining case assignments if a child died during an open IFS case. If the child had IFS involvement during the previous 12 months period, the team/agency assignment on the case closing date was used.

Using these definitions, we completed a series of descriptive and hypothesis-testing analyses. First, for each year, the child deaths were divided into three mutually exclusive and exhaustive groups of children (i.e., each child could be in only one of the groups): children who had an open IFS case at the time of their death; children who had an open IFS case during the 12 months prior to their death; and children who had no involvement with IFS during the 12 months prior to their death. Children who had an open IFS case at the time of their death and had a previous IFS case in the 12 months prior to their death were placed in the first group in order to make the categories mutually exclusive. Next, for each child who was involved in IFS either at the time of their death or in the previous 12 months, the type of agency (DCFS or POS) providing services was determined.

In order to assess the association between privatization of IFS and the risk of child death, penalized logistic regression was conducted. Penalized likelihood approach was recommended when analyzing rare events to avoid complete or quasi-complete separation

issue.² With rare events data, predictors might be only associated with one outcome value. Penalized likelihood approach is able to address this issue.³ For this analysis, all children who received IFS between 2000 – 2017 were examined and categorized into one of two groups: DCFS or POS (privatized IFS). Children were included in the POS group if they spent any time at all in an intact family case served by a POS agency; otherwise they were included in the DCFS group. A penalized logistic regression analysis then examined if children served in POS agencies were more likely to have an investigated death report or indicated death report than children served by DCFS.

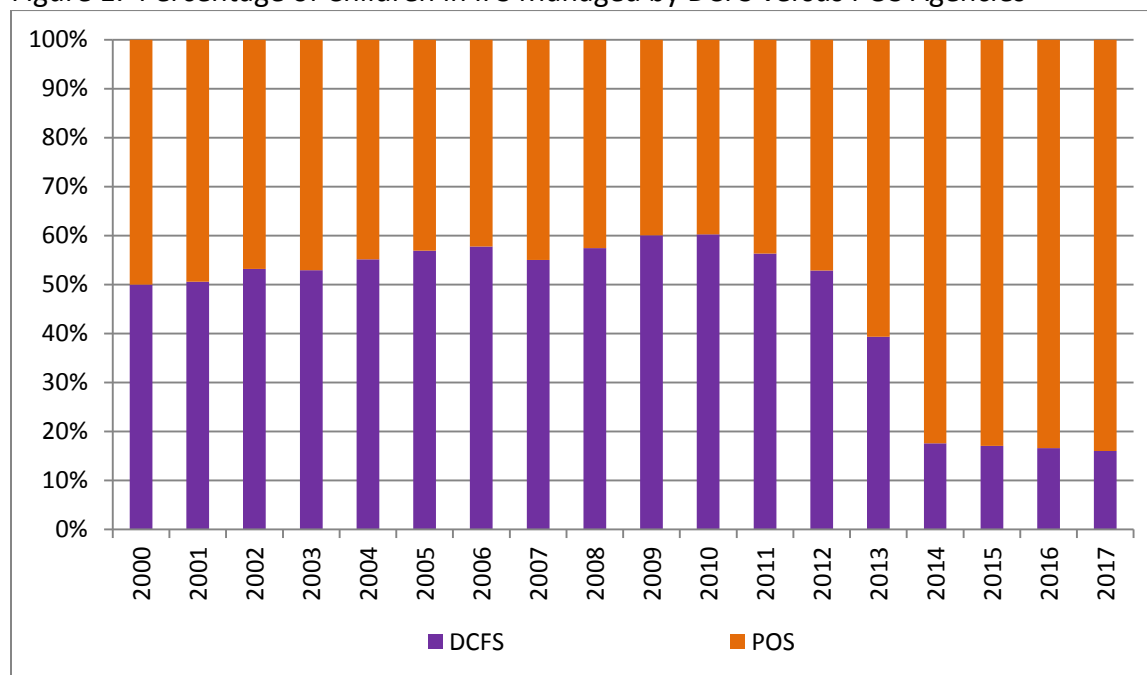
3. Results

Before presenting the results of the analysis of child deaths, we first examined one of the primary assertions in the Tribune article, that DCFS “completely privatized” Intact Family Services in 2012, which led to an increase in the number of fatalities of children served in the program. We examined the percentage of children in Intact Family Services who were ever served by a private (POS) agency each year from 2000 to 2017 (see Figure 1). The analysis shows that although the percentage of children in Intact Family Services managed by POS agencies has increased in recent years, IFS were *not* completely privatized in 2012. The percentage of children in IFS managed by POS agencies was between 50-60% prior to 2012 and increases to about 83% in 2014, but never goes above that percentage.

² Heinze, G. (2006). A comparative investigation of methods for logistic regression with separated or nearly separated data. *Statistics in Medicine*, 25, 4216-4226.

³ Other approaches to the analysis were considered as well, such as Poisson regression and interrupted time series analysis. However, penalized logistic regression was the best approach for handling rare events such as child deaths.

Figure 1. Percentage of Children in IFS Managed by DCFS versus POS Agencies



3.1 All Child Death Reports

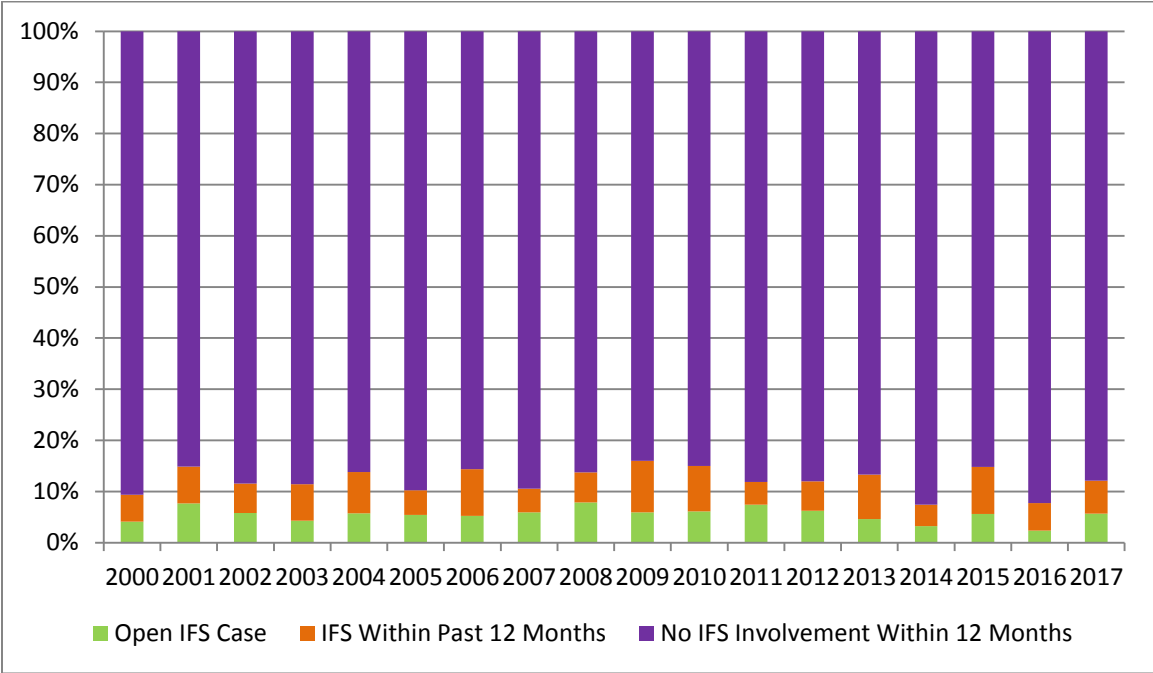
The first analyses examine *all* screened-in maltreatment reports with allegations involving child deaths, regardless of whether the death allegations were indicated (Table 1). The total number of investigated child death reports each year ranged from 140 in 2003 to 258 in 2016. As shown in Table 1 and Figure 2, the vast majority of child death reports each year (between 85-92%) involve children who have no involvement with Intact Family Services within the 12 months prior to their deaths.

Table 1. Child Death Reports and Intact Family Services Involvement (2000-2017)

	Open IFS Case on Report Date		IFS Within 12 Months Prior		No IFS Involvement Within 12 Months		Total
	N	%	N	%	N	%	
2000	7	4.1	9	5.3	155	90.6	171
2001	15	7.7	14	7.2	166	85.1	195
2002	9	5.8	9	5.8	138	88.5	156
2003	6	4.3	10	7.1	124	88.6	140
2004	10	5.8	14	8.1	150	86.2	174
2005	9	5.4	8	4.8	149	89.8	166
2006	8	5.2	14	9.2	131	85.6	153
2007	9	5.9	7	4.6	136	89.5	152
2008	12	7.8	9	5.9	132	86.5	153
2009	10	5.9	17	10.1	142	84.0	169
2010	9	6.1	13	8.8	125	85.0	147

2011	15	7.4	9	4.5	178	88.1	202
2012	12	6.3	11	5.7	169	88.0	192
2013	10	4.6	19	8.7	189	86.7	218
2014	7	3.2	9	4.2	200	92.6	216
2015	8	5.6	13	9.2	121	85.2	142
2016	6	2.3	14	5.4	238	92.3	258
2017	14	5.7	16	6.5	218	87.9	248
Total	176	5.4	215	6.6	2861	88.0	3252

Figure 2. Child Death Reports and Intact Family Services Involvement (2000-2017)



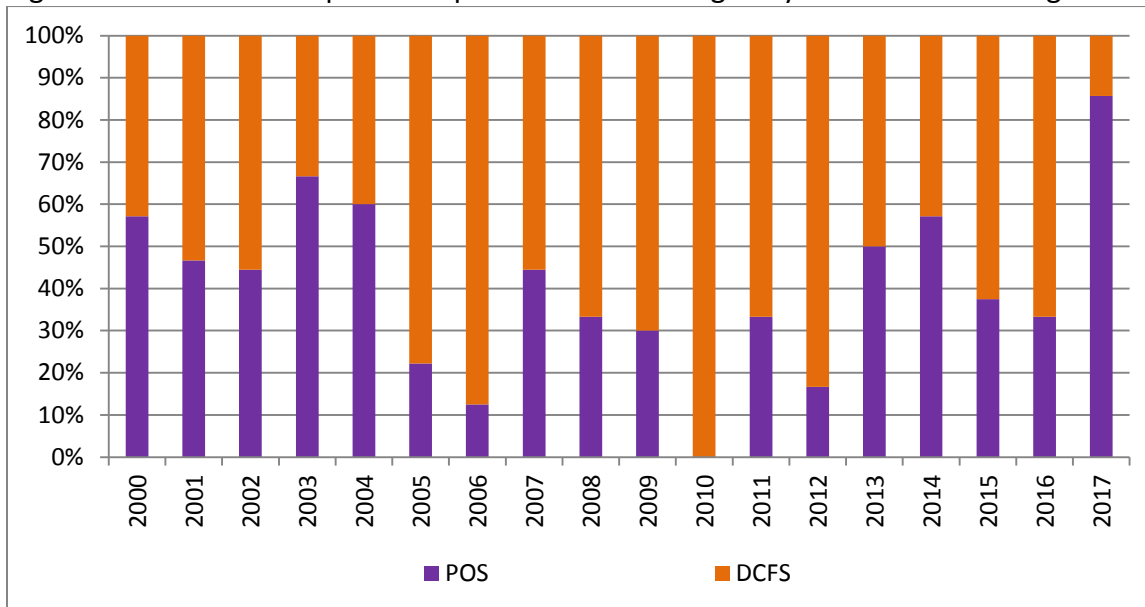
If a child death report occurred during an open IFS case or a case with IFS involvement in the prior 12 months, the type of agency (DCFS or POS) managing the family case was examined (see Table 2).

Table 2. Child Death Reports and Type of Agency Providing Intact Family Services

	Deaths During Open IFS Case			Deaths With IFS Involvement in Prior 12 Months		
	POS	DCFS	Total	POS	DCFS	Total
2000	4	3	7	3	6	9
2001	7	8	15	1	13	14
2002	4	5	9	0	9	9
2003	4	2	6	2	8	10
2004	6	4	10	2	12	14
2005	2	7	9	0	8	8
2006	1	7	8	3	11	14
2007	4	5	9	3	4	7
2008	4	8	12	1	8	9
2009	3	7	10	0	17	17
2010	0	9	9	2	11	13
2011	5	10	15	1	8	9
2012	2	10	12	1	10	11
2013	5	5	10	3	16	19
2014	4	3	7	0	9	9
2015	3	5	8	3	10	13
2016	2	4	6	0	14	14
2017	12	2	14	0	16	16
Total	72	104	176	25	190	215

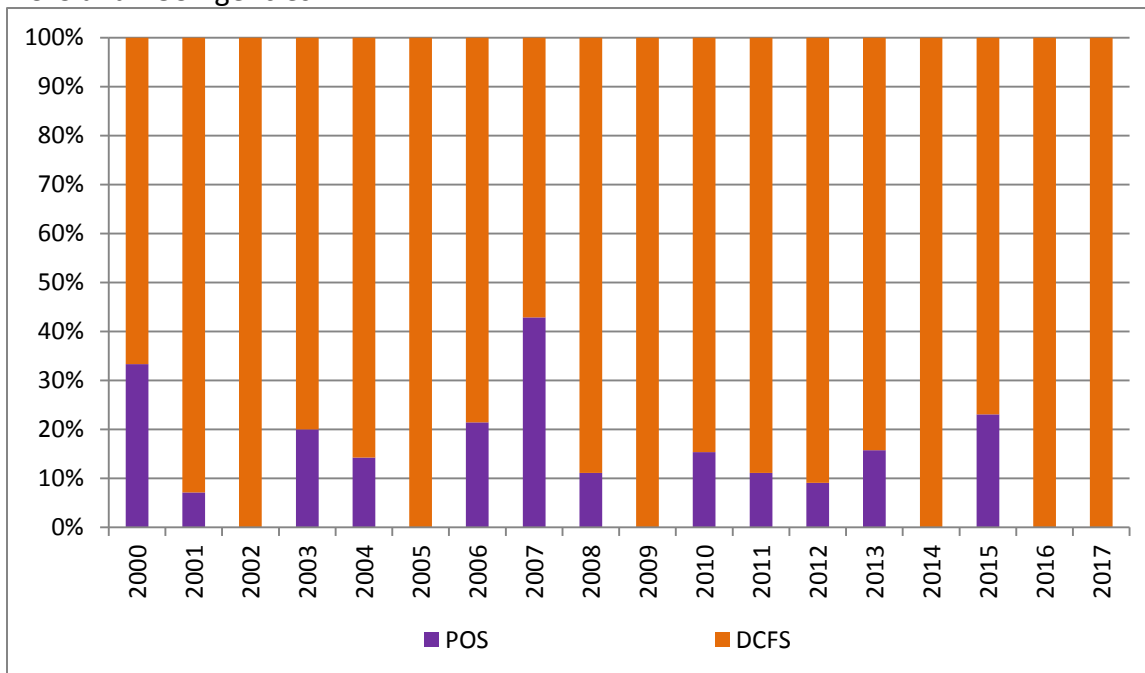
The percentages of child death reports that occurred in open IFS cases managed by POS versus DCFS agencies each year are shown in Figure 3 (please note that the total number of deaths each year is very small).

Figure 3. Child Death Reports in Open IFS Cases Managed by DCFS versus POS Agencies



The percentages of child death reports that occurred within 12 months of an IFS case managed by POS versus DCFS agencies are shown in Figure 4 (please note that the total number of deaths each year is very small).

Figure 4. Child Death Reports Among Children Previously Involved in IFS Cases Managed by DCFS and POS Agencies



The results of the penalized regression analysis revealed that there was no significant difference between the likelihood of having an investigated child death report between children served by DCFS versus POS agencies ($\beta=-0.18$, Chi-square=1.40, $p=0.24$).

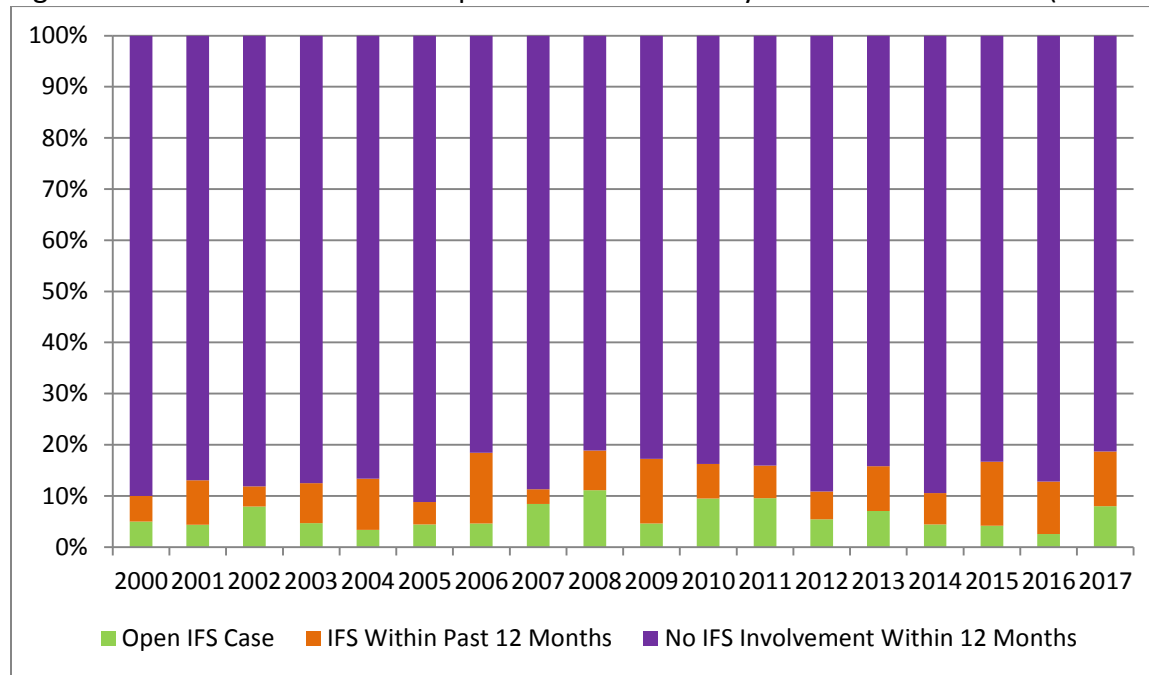
3.2 Indicated Child Death Reports

The second set of analyses examine only those child death investigations that were indicated (Table 3). The total number of indicated child death reports each year ranged from 64 in 2003 to 114 in 2013 and 2014. As shown in Table 3 and Figure 5, the vast majority of indicated child death reports each year (between 80-91%) involve children who have no involvement with Intact Family Services.

Table 3. Indicated Child Death Reports and Intact Family Services Involvement (2000-2017)

	Open IFS Case on Report Date		IFS Within 12 Months Prior		No IFS Involvement Within 12 Months		Total
	N	%	N	%	N	%	
2000	4	5.0	4	5.0	72	90.0	80
2001	4	4.4	8	8.7	80	87.0	92
2002	6	7.9	3	4.0	67	88.2	76
2003	3	4.7	5	7.8	56	87.5	64
2004	3	3.3	9	10.0	78	86.7	90
2005	3	4.4	3	4.4	62	91.2	68
2006	3	4.6	9	13.9	53	81.5	65
2007	6	8.5	2	2.8	63	88.7	71
2008	10	11.1	7	7.8	73	81.1	90
2009	4	4.6	11	12.6	72	82.8	87
2010	7	9.5	5	6.8	62	83.8	74
2011	9	9.6	6	6.4	79	84.0	94
2012	5	5.3	5	5.3	82	89.1	92
2013	8	7.0	10	8.8	96	84.2	114
2014	5	4.4	7	6.1	102	89.5	114
2015	3	4.2	9	12.5	60	83.3	72
2016	2	2.6	8	10.3	68	87.2	78
2017	6	8.0	8	10.7	61	81.3	75
Total	91	6.1	119	8.0	1286	86.0	1496

Figure 5. Indicated Child Death Reports and Intact Family Services Involvement (2000-2017)



If an indicated child death report occurred during an open IFS case or a case with IFS involvement in the prior 12 months, the type of agency (DCFS or POS) managing the family case was examined (see Table 4).

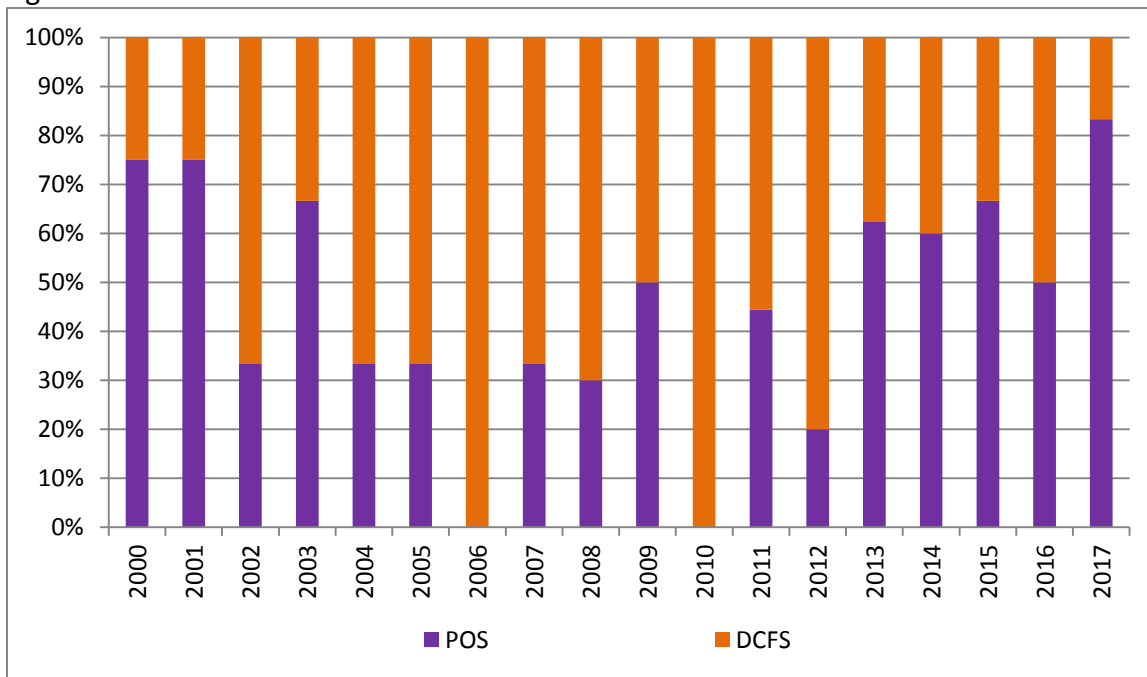
Table 4. Indicated Child Deaths and Type of Agency Providing Intact Family Services

	Deaths During Open IFS Case			Deaths With IFS Involvement in Prior 12 Months		
	POS	DCFS	Total	POS	DCFS	Total
2000	3	1	4	1	3	4
2001	3	1	4	1	7	8
2002	2	4	6	0	3	3
2003	2	1	3	2	3	5
2004	1	2	3	2	7	9
2005	1	2	3	0	3	3
2006	0	3	3	2	7	9
2007	2	4	6	2	0	2
2008	3	7	10	1	6	7
2009	2	2	4	0	11	11
2010	0	7	7	1	4	5
2011	4	5	9	1	5	6
2012	1	4	5	0	5	5
2013	5	3	8	1	9	10
2014	3	2	5	0	7	7
2015	2	1	3	3	6	9

2016	1	1	2	0	8	8
2017	5	1	6	0	8	8
Total	40	51	91	17	102	119

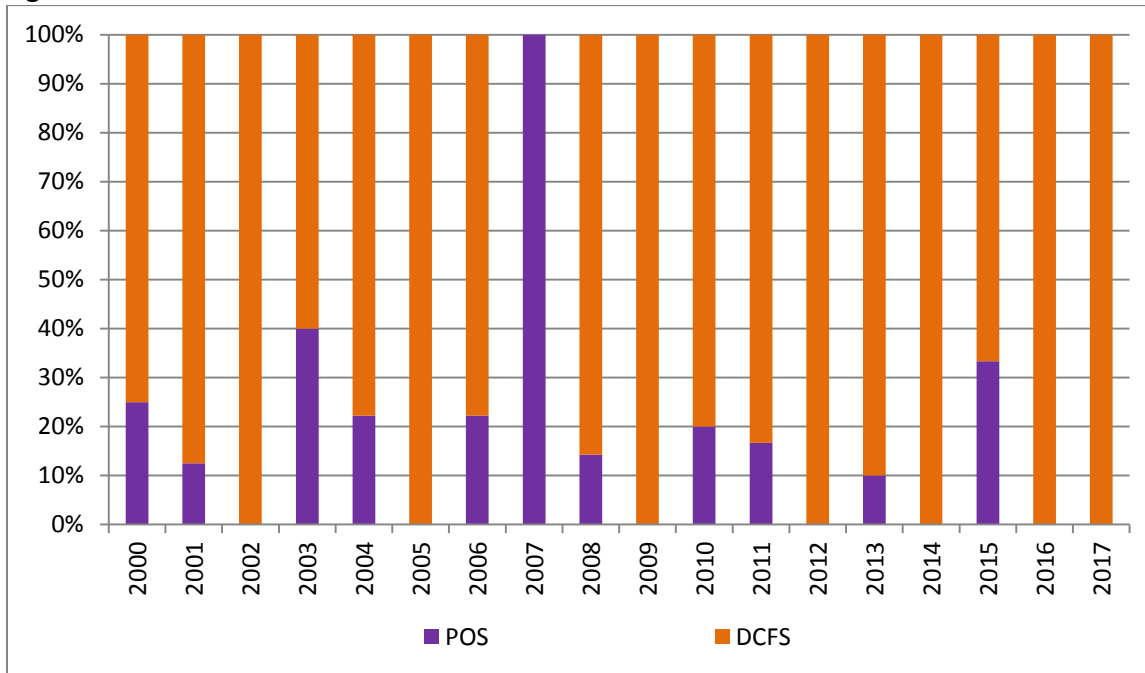
The percentages of child death reports that occurred in open IFS cases managed by POS versus DCFS agencies each year are shown in Figure 6 (please note that the total number of indicated deaths each year is very small).

Figure 6. Indicated Deaths That Occurred in Open IFS Cases Managed by DCFS versus POS Agencies



The percentages of child death reports that occurred within 12 months of an IFS case managed by POS versus DCFS agencies are shown in Figure 7 (please note that the total number of indicated deaths each year is very small).

Figure 7. Indicated Deaths Among Children Previously Involved in IFS by DCFS versus POS Agencies



The results of the penalized regression analysis revealed that there was no significant difference between the likelihood of having an indicated child death report between children served by DCFS versus POS agencies ($\beta=-0.06$, Chi-square=0.07, $p=0.79$).

4. Summary and Conclusions

The results of the current analyses on child deaths and Intact Family Service involvement suggest the following conclusions:

- Intact Family Services have been provided by *both* DCFS and private child welfare agencies since 2000, which was the first year that we examined in our analyses. The percentage of IFS cases served by private agencies ranged from 40-50% throughout the 2000s and early 2010s and increased to around 80% from 2014 – 2017. It is therefore impossible to examine the impact of the “complete privatization” of IFS in Illinois because it never occurred.
- Between 142 – 248 child deaths are reported to the DCFS State Central Register each year; about half of these deaths are indicated following investigation. Only a small percentage of these alleged and indicated deaths have been involved with Intact Family Services within the past year or at the time of the reported death.
- When the child deaths that were involved with Intact Family Services were examined, there were no differences in the risk of either investigated child deaths or indicated

child deaths among children served by DCFS and those served by private child welfare agencies.