Healthy Start of Oregon 2005-2006 Maltreatment Report



Submitted to:

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HEALTHY START MALTREATMENT REPORT 2005-2006

ne of the primary goals of Healthy Start is to ensure that children are free from maltreatment, including physical and emotional neglect and abuse. This report presents data on reported child maltreatment among families participating in Oregon's Healthy Start program, as well as those not served through Healthy Start. Information on other important outcomes of the Healthy Start program can be found in the Healthy Start Annual Status Report (www.oregon.gov/OCCF).

Child Maltreatment in Context

In Oregon, there were 10,622 reported victims of child abuse or neglect in FY 2003-04; in FY 2005-06 there were 11,255 total victims, an increase of 6% overall, and 7% for victims under the age of 3 years (OR DHS, 2005). This finding reflects a trend over the past 4 years of increasing numbers of maltreatment reports in Oregon. The increase in child maltreatment has been attributed to two primary factors:

- 1. The dramatic increase in methamphetamine abuse among Oregon families;
- 2. The reduction in funding for DHS child welfare, and other, services during the 2004-06 biennium.

Substance abuse in general, and methamphetamine in particular, is a critical issue for child protection. In 2005, 62% of Oregon children in foster care had a parent with drug abuse issues. Of the 1,450 children in foster care on a given day in Multnomah County, half come from homes with methamphetamine-addicted parents (Whelan & Boggess, 2005).

Methamphetamine is not just an Oregon phenomenon. While there are no current national statistics available, states and counties where methamphetamine is most prevalent report that the percentage of children who have en-

tered foster care has increased significantly. This finding is even more striking due to data demonstrating that in



general from 2000 to 2004, the number of children in foster care decreased nationally. Methamphetamine has contributed to an increase in out of home placements and an increase in the number of children who cannot be reunified with their birth families. In California, for example, 71% of counties have reported an increase in out of home placements due to methamphetamine use (Generations United, 2006).

In Oregon, 50% of all substantiated victims of abuse or neglect were under age 6, and 30% were under age 3. Infants (children under 1 year of age) represent 15% of the overall victims, by far the largest single age group. Consistent with Oregon statistics, national data also find that very young children are the most likely to be abused, with some studies finding that infants under 1 year of age are more than twice as likely to suffer abuse than teenaged children (English, 1998). Children ages 0 to 6 comprise 39% of the children served in foster care in Oregon. The recent increases in community rates of substance abuse and child maltreatment provide an important context for evaluating the Healthy Start program.

At the same time that the challenge of reducing maltreatment appears to be increasing, however, there is growing evidence that home visiting is an effective means of preventing abuse and neglect. High-quality, intensive home visiting services delivered to those most at risk of poor child and family outcomes has been found to reduce the incidence of child maltreatment (Sweet & Ap-



pelbaum, 2004; Olds et al., 1999). In their meta-analysis of over 60 home visiting research studies, Sweet and Appelbaum (2004) concluded that programs that were more successful at reducing the risk factors for child maltreatment were those programs that:

- 1. Identified preventing child abuse as an explicit program goal;
- 2. Utilized paraprofessional staff (instead of either professional or non-professional staff)¹; and
- 3. Focused on high-risk parents.

Conversely, home visiting programs that have not been well implemented, and that are less successful at identifying and working with serious problems such as parental substance abuse, mental illness, and severe parenting stress have been less successful (Aos, Lieb, Mayfield, Miller, & Pennucci, 2004).

The need for well-implemented programs is illustrated by the divergent set of findings from evaluations of home visiting programs. Mitchell-Herzfeld, Izzo, Greene, Lee, and Lowenfels (2005), in their randomized study of Healthy Families New York, found significant reductions in the use of harsh discipline techniques that are strongly related to maltreatment. They also found that Healthy Families parents were more likely than parents in the control group to have better birth outcomes, breastfeed their babies, and have health insurance for their children.

Several other states implementing accredited Healthy Families America programs have found evidence for its effectiveness in reducing child abuse and neglect. The State of Arizona Auditor General's report found that 97% of the Healthy Families Arizona higher-

risk families who received at least 6 months of home visitation were free of substantiated reports of abuse or neglect. This figure contrasts with 92% for comparison group families during a similar time period (Norton, 1998). Healthy Families Florida (Williams, Stern & Associates, 2005), also an HFA-accredited program, found significantly lower rates of maltreatment among children whose families received services consistent with the HFA model (frequent home visits, early onset of services, and expected duration of services) compared to families not served by the program.

In contrast, two other evaluations, the first of the Hawaii Healthy Start program and the second of Healthy Families Alaska, found no evidence that Healthy Families America home visiting reduced child maltreatment or associated risk factors (Duggan et al., 2004; Duggan et al., 2006). However, the process evaluations for both of these studies indicated significant implementation problems (Duggan et al., 2004, 2006). Further, neither the Hawaii nor the Alaska programs were accredited HFA statewide systems.

These studies, as well as studies of the Nurse-Family Partnership Program (Olds et al., 1999) suggest that quality of program implementation can influence the success of home-visiting programs to achieve desired outcomes.

Further, it is important to recognize that while child maltreatment represents one extreme (negative) end of the continuum of parenting quality, many children who are not neglected or maltreated can benefit from programs such as Healthy Start. Early learning programs that seek to improve the ability of parents to support their children to succeed later in school have been shown to have positive (and cost-beneficial) long-term outcomes. (Shonkoff & Phillips, 2000). The Healthy Start Annual Status Report (Green et

¹ Paraprofessionals were defined as individuals without formal training and who typically come from the same community as those being visited. Professionals had formal training and experience in help-giving; non-professionals had formal education but no prior home visiting training.



al., 2007) presents results for these other, broader outcomes for Healthy Start families.

Finally, it should be noted that there is controversy over the use of actual reported maltreatment rates as an outcome in studies of the effectiveness of home visiting programs (Olds, Eckenrode, & Kitzman, 2005). The primary concern is that because home visitors are mandated reporters of maltreatment, the very act of providing home visits for very at-risk families may increase, rather than decrease, reported maltreatment. Home visitors work closely with very at-risk families and thus may identify neglect or abuse that would otherwise have gone unreported, a consequence sometimes referred to as a "surveillance" effect. Because of this possibility, many studies have elected not to measure actual maltreatment rates. A more common approach is to measure a program's ability to strengthen family protective factors and reduce family risk factors that are associated with increased risk for maltreatment. Oregon's Healthy Start program does conduct an annual evaluation of these risk and protective factors and finds positive results (Green et al., 2007.

A further complication is the overall low incidence of child maltreatment in the popula-

tion (State of Arizona Office of the Auditor General, 2000). For example, in Oregon, only about 2 to 3% of the age 0 to 3 population are maltreated. Detecting reductions in these so-called "low frequency events" is challenging for statistical reasons, and requires extremely large research samples. However, given the potential costs to individuals and society, even small reductions in maltreatment incidents can have significant and cost-beneficial long-term effects (Miller, Cohen, & Wiersema, 1996).

Because reducing incidents of child maltreatment is one of the primary goals of Oregon's Healthy Start program, the program has elected to examine actual reported maltreatment rates as a benchmark of program success. The reader should keep in mind, however, that for Healthy Start's high-risk families, rates of maltreatment may be higher than general state or community maltreatment rates both because of the families' higher risk status as well as because of the "surveillance" effects described above.

This report presents the analyses of the effects of Oregon's Healthy Start program on child maltreatment for fiscal year 2005-06.



METHODOLOGY

Child Maltreatment Data

Through a collaborative data-sharing agreement between the Oregon Commission on Children and Families (OCCF), NPC Research, and the Oregon Department of Human Services, Children, Adults, and Families Division (CAF), data regarding the incidence of substantiated reports of child abuse and neglect for Healthy Start children were obtained. NPC Research provides a dataset comprised of Healthy Start participant identification numbers to OCCF for matching with parent-level identifiers (parent and child birth date, race/ethnicity, county of birth, and child gender). This dataset is in turn provided to staff at CAF, who match the Healthy Start sample with records of substantiated maltreatment reports. The dataset is then stripped of identifiers except for numeric Healthy Start ID numbers and returned to NPC Research for analysis.

Research Sample

HEALTHY START GROUP

The results presented in the next section of the report include data for Healthy Start children ages 0 to 3 during the current status report period (July 1, 2005, through June 30, 2006). Maltreatment reports were included in the analysis if they occurred during this period. Analyses include all children served through Healthy Start's screening and referral process, as well as those served through Intensive Home Visiting.

Because the outcome of interest for the Oregon Healthy Start program is *prevention* of child abuse and neglect, families who had open child welfare cases prior to being screened by Healthy Start were eliminated

from these analyses. Additionally, families in which the Family Support Worker indicated that a Child Protective Services report had been made by the program at the time of family enrollment were also removed from these analyses. A total of 180 children (1% of the total sample) were removed for these reasons.

COMPARISON GROUP

The primary comparison group for this report is children up to 3 years of age who were *not served* by Healthy Start. Because



Healthy Start screened only about 40% of children during both FY 2004-05 and FY 2005-06, children born during this period but not served by Healthy Start comprise a naturally existing, although not ideal, comparison group. Several differences between served and non-served families are important to note. First, the Healthy Start group includes primarily first-born children, while the general non-served population includes subsequent births. Parents of multiple children may be somewhat more likely to abuse or neglect their children (Berendes et al., 1998), although this finding has not been well studied.

Second, because of reductions in funding for Healthy Start, programs have focused their screening and outreach on higher-risk populations, as evidenced by the higher preponderance of risk factors such as teenage parents, single parents, and unemployed parents in the Healthy Start group as compared to the general population (Green et al., 2007). Thus,

¹ The analyses include children 0 to 3 during FY 2005-06 who were ever served by Healthy Start; they may not have been served during FY 2005-06.



the Healthy Start group is relatively higher risk compared to non-served families.

Finally, using this general population comparison group does not allow an analysis of the effects of Intensive Home Visiting services specifically. Because Healthy Start Intensive Services are offered only to those families at highest risk of maltreatment and other negative outcomes, the Intensive Service group is much higher in risk factors compared to the general population. How-

ever, in the general population, where there is likely to be combination of both higher and lower-risk families, it is not possible to separate the high-risk families who are most similar to those served by Healthy Start. For this reason, it is most appropriate to use the entire Healthy Start population (both families who received Intensive Services and those who received only screening, information, and service referrals) as the point of reference for comparison.



RESULTS

Healthy Start vs. Non-Healthy Start Children

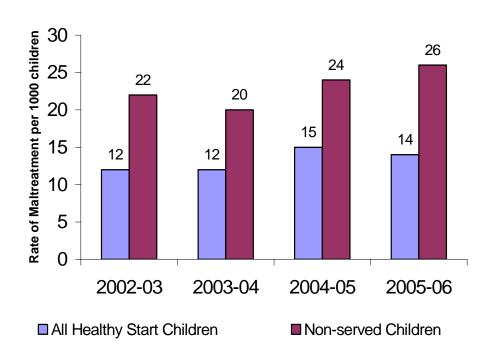
The first set of analyses compares all families served by Healthy Start (both screening- and referral-only and Intensive Service families) to all Oregon children up to 3 years of age who were not served by Healthy Start. As described previously, Healthy Start is not able to reach all families with newborns within each county. Hence, non-served families provide a naturally existing comparison group for examining the incidence of child abuse.

As shown in Figure 1, children served by Healthy Start had lower victimization rates compared to similar-aged non-served children (14 per 1,000 compared to 26 per 1,000; county-level data are shown in Table 1 in

Appendix A). These rates are relatively similar to prior years' results.

In FY 2005-06, the maltreatment rate for Healthy Start children up to 3 years old was 14/1,000. This result compares favorably to non-Healthy Start children, who had a maltreatment rate of 26/1,000. A comparison of child abuse statistics for the past 8 years shows that the vast majority of Healthy Start children, between 0 and 3 years of age, do not have substantiated reports of child maltreatment. The percentage of those Healthy Start children free from maltreatment has not varied markedly over the past several years, ranging from 12/1,000 in FY 2002-03, to 14/1,000 in FY 2005-06; however, the rate of maltreatment in the non-served population appears to be increasing over the past 3 years, from 20/1,000 in 2003-04 to 26/1,000 in 2005-06.

Figure 1. Rate of Maltreatment for Healthy Start Compared to Non-Served Children





Ideally, it would be possible to compare the rates of child maltreatment for the higher-risk families receiving Intensive Services to a similarly high-risk group of families who did not receive Intensive Services. At this time such a comparison is not possible, given current evaluation structure and program resources. However, in FY 2005-06, as a part of the ongoing credentialing efforts, a policy was instituted that would allow the evaluation to identify families who were eligible for Intensive Services but who were unable to be served due to funding constraints or other issues. This group, which will be identifiable during the 2006-07 fiscal year, will provide a quasi-experimental stronger comparison group in the future so that the evaluation can more directly examine the influence of Healthy Start on the maltreatment rates for the higher-risk Intensive Service families. A small group of families in FY 2005-06 were identified as eligible but non-served in Intensive Services using the Kempe Assessment (353 families); unfortunately, this group is too small to allow analysis of abuse rates.

It is possible, however, to compare the maltreatment rates for Oregon's Intensive Service families to the rates found in other studies of high-risk populations. Generally, these comparisons suggest that Oregon's Healthy Start Intensive Service families have lower rates of abuse and neglect than these comparable populations. For example, a randomized trial of the Nurse-Family Partnership program (NFP) found that 96% of higher-risk teenaged mothers who were visited by a nurse for 2 years were free of maltreatment, compared to only 79% of impoverished, unmarried teens who received no home visiting (Olds, 1997). Among Healthy Start Intensive Service teenaged parents, the percentage free from maltreatment (96.4%) is comparable to what was found for the NFP program's treatment group (96% free from maltreatment). Further, in a randomized trial of Hawaii's Healthy Start program, 96.6% of the children in higher-risk families served by paraprofessional home visitors were free from maltreatment during the first year of life in contrast to only 93.2% of a control group who were not visited (Center on Child Abuse Prevention Research, 1996). It should be noted, however, that reported maltreatment rates vary significantly across communities due to differences in such factors as child welfare reporting/investigation systems and community demographics, and thus these comparisons should be made with caution.

Intensive Service Families

As expected, and consistent with prior years, rates of maltreatment for Healthy Start Intensive Service families were higher (23 per 1000) than those for families who were served only screening, with information, and referral services



(11 per 1000) see Table 2 in Appendix A). However, it is important to note that the maltreatment rate for Healthy Start Intensive Services families, who are by definition at high risk for maltreatment, is actually lower than the rate for the general population of non-served Healthy Start families (23 per 1,000 vs. 26 per 1,000). This is striking, given the preponderance of risk factors that characterize Healthy Start Intensive Service families. On average, Healthy Start Intensive Service families had about three risk factors: families served with only screening, information, and referrals had just over one risk factor, on average. As shown below, family risk status is strongly associated with increased incidence of maltreatment.

Additionally, it should be noted that Healthy Start FSWs made reports to DHS on 61 families during FY 2005-06. It is not possible to



know which, if any, of these resulted in founded DHS maltreatment incidents.

Maltreatment and Risk Factors

Child maltreatment rates are strongly related to results from risk screening. As shown in Figure 2, and in Table 3 in Appendix A, the more risks families have, the more vulnerable their children are to abuse or neglect. Risk characteristics include such factors as being single at the child's birth, being 17 years or younger, experiencing poverty, having a spouse/partner who is unemployed, not receiving early comprehensive prenatal care, having unstable housing, experiencing marital or family conflict, having a history of substance abuse or mental health problems, and having less than a high school education.

Regardless of which specific risk factors are present, Healthy Start data have consistently found that as the number of risk factors increase, the likelihood of maltreatment increases. As can be seen in Figure 2, and Table 3 in Appendix A, the odds of abuse occurring do not significantly increase for families having one risk factor (vs. no risk factors), but when families have any two risk characteristics, they are more than twice as likely to have a reported abuse incident than families with no risk factors. The odds of abuse are thirteen times higher for families with six risk factors.

Results also show that scores on the Kempe Assessment are strongly linked to rates of maltreatment. The rate of child abuse and neglect is 18 per 1,000 for children whose families score in the "moderate" stress range. This rate climbs to 34 per 1,000 children for families with high stress, and to 74 per 1,000 for families at the highest stress levels (see Table 4 in Appendix A).

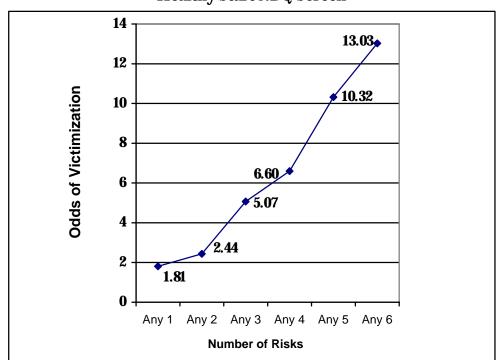


Figure 2. Likelihood of Maltreatment by Number of Risks on Healthy Start NBQ Screen



Types of Maltreatment

Contrary to popular belief, the vast majority of reports of maltreatment do not involve physical or sexual abuse. In Oregon, during FY 2005-06, only 14% of all victims experienced physical or sexual abuse; more common were neglect (41% of victims) or "threat

of harm" (69% of victims). A determination of "threat of harm" indicates that there is a substantial danger to the child, often because of witnessing domestic violence or being at substantial threat of harm due to parents' drug or alcohol issues. Threat of harm is the single most frequent type of maltreatment recorded in Oregon.



SUMMARY & DISCUSSION

verall, the findings from our analyses of the FY 2005-06 child maltreatment data indicate that children served by Healthy Start had a lower victimization rate than nonserved children, and that the maltreatment rates are similar to prior years. The rate of children free from maltreatment who were involved in Healthy Start Intensive Services (97.7%) compares favorably to other studies of home visitation programs for at-risk families. A surveillance effect was evident, demonstrating that some reports of maltreatment were actually made by the Healthy Start workers, due to their frequent contact with and observation of the higher-risk families with whom they work. Consistent with prior years, and with research linking risk factors to maltreatment rates, families with more risk factors and higher scores on the Kempe Assessment were more likely to have had a report of maltreatment.

The 2005-06 fiscal year was a time of reduced funding for Healthy Start, so the overall positive results in terms of main-

taining lower rates of child maltreatment are striking. There were across the board budget cuts for all Healthy Start programs, and the program was funded to serve fewer families in FY 2005-06 than in any previous year. Reductions in staffing led to challenges in keeping families engaged in services, as families form close relationships with their home visitors and are unlikely to re-engage if their visitor leaves the program.

Further, other important services for Oregon's at-risk families struggled under limited budgets during FY 2005-06. Reductions to services such as health insurance, mental health, and, perhaps most importantly, substance abuse treatment, limited the ability of Healthy Start providers to successfully link families to needed services. Given this statewide context, it is especially encouraging that Oregon's Healthy Start program continues to be associated with supporting positive family outcomes and reducing the incidence of child maltreatment.



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APPENDIX A: HEALTHY START OF OREGON 2005-2006 MALTREATMENT REPORT DATA TABLES

Table 1. Children Aged 0-3 Free from Maltreatment (FY 2005-06) for Healthy Start and Non-Healthy Start

		Healthy Sta	rt Children		Non-Healthy Start Children					
Site	Child abuse victims in FY 05-06 ¹	Total Healthy Start children, aged 0-3 yrs	% Free from maltreatment ²	Incidence rate per 1,000	Child abuse victims in FY 05-06	Number children, 0-3 yrs not served by Healthy Start	% Free from maltreatment ²	Incidence rate per 1,000		
Benton	^	٨	^	٨	36	1,793	98.0%	20		
Clackamas	18	973	98.2%	18	125	10,904	98.8%	11		
Clatsop	^	٨	^	٨	25	1,118	97.8%	22		
Columbia	^	٨	^	٨	44	1,466	97.0%	30		
Coos	^	٨	^	٨	69	1,838	96.2%	38		
Crook	^	٨	^	٨	13	558	97.7%	23		
Curry	^	٨	٨	٨	٨	^	٨	17		
Deschutes	6	998	99.4%	6	84	4,013	97.9%	21		
Douglas	٨	٨	٨	٨	86	2,792	96.9%	31		
Gilliam	0	12	100.0%	0	٨	٨	٨	٨		
Grant	0	11	100.0%	0	7	176	96.0%	40		
Harney	٨	٨	٨	٨	6	189	96.8%	32		
Hood River	^	٨	۸	٨	23	764	97.0%	30		
Jackson	27	680	96.0%	40	249	5,785	95.7%	43		
Jefferson	^	^	٨	۸	22	881	97.5%	25		

Note: The Oregon Department of Human Services, Children, Adults, and Families Division (CAF) electronically checked records of 14,964 Healthy Start children born between July 1, 2003, and June 30, 2005, for confirmed incidents of child maltreatment during FY 2005-06. These results exclude 180 reports that occurred prior to the family's involvement with Healthy Start, and/or because the Family Support Worker indicated on the Family Intake Form that a Child Protective Services report had been make by the program at the time of enrollment. Total Healthy Start children include screened/referred families (no home visiting) and Intensive Service families (these results exclude 29 additional cases because of missing Healthy Start county of service).

Non-Healthy Start Children are the total number of children born in each county from 2003 to 2005 according to the Oregon Health Department (OHD) birth statistics (found at http://www.dhs.state.or.us/dhs/ph/chs/data/birth/birthdata.shtml) *minus* the number of children screened/served by Healthy Start. Similarly, child abuse victims among non-Healthy Start children are the total number of child maltreatment victims, aged 0-3 years, for each county *minus* the number of Healthy Start victims.

²Percentages are affected by sample size and can be misleading when sample sizes are small.

[^] Due to DHS restrictions on reporting data about small samples, these data are unavailable for this report. April 2007

Site		Healthy Sta	rt Children		Non-Healthy Start Children					
	Child abuse victims in FY 05-06 ¹	Total Healthy Start children, aged 0-3 yrs	% Free from maltreatment ²	Incidence rate per 1,000	Child abuse victims in FY 05-06	Number children, 0-3 yrs not served by Healthy Start	% Free from maltreatment ²	Incidence rate per 1,000		
Josephine	٨	۸	٨	٨	75	2,140	96.5%	35		
Klamath	^	۸	^	٨	93	2,171	95.7%	43		
Lake	^	۸	۸	٨	10	169	94.1%	59		
Lane	17	1138	98.5%	15	232	9,570	97.6%	24		
Lincoln	8	261	96.9%	31	40	1,035	96.1%	39		
Linn	9	543	98.3%	17	134	3,564	96.2%	38		
Malheur	^	٨	^	٨	64	1,303	95.1%	49		
Marion	28	1621	98.3%	17	460	12,348	96.3%	37		
Morrow	^	٨	٨	٨	11	439	97.5%	25		
Multnomah	38	3620	99.0%	10	661	24,547	97.3%	27		
Polk	^	٨	٨	٨	68	2,137	96.8%	32		
Sherman	0	8	100.0%	0	0	42	100.0%	0		
Tillamook	٨	٨	٨	٨	20	648	96.9%	31		
Umatilla	11	548	98.0%	20	78	2,710	97.1%	29		
Union	^	٨	٨	٨	30	769	96.1%	39		
Wallowa	^	^	٨	٨	11	154	92.9%	71		
Wasco	^	٨	٨	٨	21	700	97.0%	30		
Washington	6	1196	99.5%	5	319	21,562	98.5%	15		
Yamhill	^	۸	۸	٨	67	3,227	97.9%	21		
Total	212	14,754	98.6%	14	3,190	121,901	97.4%	26		

Table 2. Children Aged 0-3 Free from Maltreatment by Service Type (FY 2005-06)

	Children	n in Healthy Start	t Screened/Referr	ed Families	Children in Healthy Start Intensive Service Families					
Site	Child abuse vic- tims in FY 05-06 ¹	Basic service children, 0-3 years	% free from maltreat- ment ²	Incidence rate per 1,000	Child abuse victims in FY 05-06 ¹	Intensive Service Children, 0-3 yrs	% free from maltreat-ment ²	Incidence rate per 1,000		
Benton	^	٨	٨	٨	٨	۸	٨	٨		
Clackamas	۸	۸	۸	۸	۸	^	٨	٨		
Clatsop	٨	٨	^	^	^	^	٨	٨		
Columbia	^	^	^	^	^	^	٨	^		
Coos	۸	۸	^	^	٨	^	۸	^		
Crook	^	٨	^	^	^	^	٨	^		
Curry	^	٨	^	^	^	^	٨	٨		
Deschutes	^	٨	^	^	^	^	۸	^		
Douglas	^	٨	^	^	٨	^	٨	٨		
Gilliam	0	11	100.0%	0	0	1	100.0%	0		
Grant	0	3	100.0%	0	0	8	100.0%	0		
Harney	^	^	100.070	^	^	^	۸ ۸	^		
Hood River	۸	۸	^	^	^	^	٨	٨		
Jackson	11	432	97.5%	25	16	248	93.5%	65		

Note: The Oregon Department of Human Services, Children, Adults, and Families Division (CAF) electronically checked records of 14,964 Healthy Start children born between July 1, 2003, and June 30, 2005, for confirmed incidents of child maltreatment during FY 2005-06. These results exclude 180 reports that occurred prior to the family's involvement with Healthy Start, and/or because the Family Support Worker indicated on the Family Intake Form that a Child Protective Services report had been make by the program at the time of enrollment. Total Healthy Start children include screened/referred families (no home visiting) and Intensive Service families (these results exclude 29 additional cases because of missing Healthy Start county of service).

Non-Healthy Start Children are the total number of children born in each county from 2003 to 2005 according to the Oregon Health Department (OHD) birth statistics (found at http://www.dhs.state.or.us/dhs/ph/chs/data/birth/birthdata.shtml) *minus* the number of children screened/served by Healthy Start. Similarly, child abuse victims among non-Healthy Start children are the total number of child maltreatment victims, aged 0-3 years, for each county *minus* the number of Healthy Start victims.

² Percentages are affected by sample size and can be misleading when sample sizes are small.

Due to DHS restrictions on reporting data about small samples, these data are unavailable for this report. April 2007

	Childre	n in Healthy Start	Screened/Referr	ed Families	Children in Healthy Start Intensive Service Families					
Site	Child abuse vic- tims in FY 05-06 ¹	Basic service children, 0-3 years	% free from maltreat- ment ²	Incidence rate per 1,000	Child abuse victims in FY 05-06 ¹	Intensive Service Children, 0-3 yrs	% free from maltreat-ment ²	Incidence rate per 1,000		
Jefferson	^	٨	^	^	۸	٨	٨	٨		
Josephine	٨	٨	٨	٨	٨	^	٨	٨		
Klamath	٨	^	٨	٨	^	^	٨	٨		
Lake	٨	۸	٨	٨	٨	٨	۸	٨		
Lane	9	760	98.8%	12	8	378	97.9%	21		
Lincoln	٨	۸	٨	٨	٨	٨	۸	٨		
Linn	٨	٨	٨	^	^	٨	٨	٨		
Malheur	٨	۸	۸	۸	۸	۸	۸	٨		
Marion	22	1,274	98.3%	17	6	347	98.3%	17		
Morrow	^	^	^	^	^	^	^	٨		
Multnomah	29	2,880	99.0%	10	9	740	98.8%	12		
Polk	^	2,000	^	^	^	^	^	^		
Sherman	0	5	100.0%	0	0	3	100.0%	0		
Tillamook	٨	^	^	^	^	^	^	^		
Umatilla	٨	٨	٨	٨	^	٨	٨	٨		
Union	۸	^	^	۸	^	^	۸	^		
Wallowa	٨	۸	٨	٨	٨	٨	٨	٨		
Wasco	٨	۸	^	^	^	^	^	^		
Washington	٨	٨	٨	٨	^	٨	٨	٨		
Yamhill	٨	۸	٨	^	^	٨	۸	٨		
Total	127	11,050	98.9%	11	85	3,704	97.7%	23		

Table 3. Likelihood of Child Maltreatment Based on Number of Risks¹ (FY 2005-06)

	Parameter Estimate	Odds of Child Victimization ³
Any one risk vs. none $(Sample = 2,582)^2$.594	1.81
Any two risks vs. none (Sample = 2,304)	.893	2.44**
Any three risks vs. none (Sample = 2,058)	1.623	5.07***
Any four risks vs. none (Sample = 1,410)	1.89	6.60***
Any five risks vs. none (Sample = 728)	2.33	10.32***
Any six risks vs. none (Sample = 282)	2.57	13.03***

^{*} p < .01; **p < .001

Note: A logistic regression model was used to model the effects of the total number of risk characteristics shown by each family on the likelihood of child maltreatment for children aged 0 to 3 years during FY 2005-06, for which there was child victimization information.

¹ The number of risks were recorded on the New Baby Questionnaire.

² Sample sizes reflect the number of families within the targeted risk grouping (e.g., 2,582 families had only one risk factor).

³Odds ratios show the likelihood of child maltreatment occurrence for families with risk characteristics in comparison to families with no risk characteristics. For example, among families screened by Oregon Healthy Start, children whose families have three risks at the time of birth are 2.38 times more likely to have been confirmed victims of child maltreatment than children whose families had no risks.

Table 4. Child Maltreatment Victims by Stress Level

	2002-03			2003-04				2004-05		2005-06		
	Number (Percent)	No Abuse	Victims	Number (Percent)	No Abuse	Victims	Number (Percent)	No Abuse	Victims	Number (Percent)	No Abuse	Victims
Kempe Assessment												
Assessed at low stress	667 (18%)	99.0%	10/1,000	986 (19%)	99.4%	6/1,000	830 (18%)	99.4%	6/1,000	620 (16.5%)	99.2%	8/1000
Assessed at moderate stress	1,554 (43%)	99.0%	10/1,000	2,207 (44%)	98.7%	13/1,000	2,046 (45%)	98.3%	17/1,000	1,766 (47.1%)	98.2%	18/1000
Assessed at high stress	1,247 (35%)	96.6%	34/1,000	1,690 (34%)	96.0%	40/1,000	1,508 (33%)	95.7%	43/1,000	1,270 (33.9%)	96.6%	34/1000
Assessed at severe stress	129 (4%)	92.4%	78/1,000	150 (3%)	92.6%	74/1,000	125 (3%)	91.2%	88/1,000	94 (2.5%)	92.6%	74/1000
Total higher- risk families interviewed	3,597	97.9%	27/1,000	5,033	97.7%	23/1,000	4,509	97.4%	26/1,000	3,750	97.7%	23/1000

Note: Statistics describe confirmed reports of child maltreatment for Healthy Start children aged 0 to 3 years where families have both screening and assessment information. First, families are screened using the New Baby Questionnaire. Families with positive screens are interviewed by trained assessment workers using the Kempe Family Stress Assessment.

Kempe Family Stress Assessments are rated on a scale of 0 - 100. Low family stress is rated as 0 - 20, moderate family stress as 25 - 35, high family stress as 40 - 60, and severe family stress as 65 or higher. Families with moderate to higher levels of stress (25 or higher) are offered Healthy Start's intensive visiting services.