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Journal

Journal of Evidence-Informed Social Work, 13(1)

ISSN

2376-1407 2376-1415

Authors

Mosqueda, Laura Wiglesworth, Aileen Moore, Alison A et al.

Publication Date

2015-06-10

DOI

10.1080/15433714.2014.939383

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Peer reviewed

Published in final edited form as:

J Evid Inf Soc Work. 2016; 13(1): 34–44. doi:10.1080/15433714.2014.939383.

Variability in Findings from Adult Protective Services Investigations of Elder Abuse in California

Laura Mosqueda, M.D.,

Department of Family Medicine, UC Irvine; UCIMC, 101 The City Drive South, Building 200, Suite 835, Orange, CA 92868; (714)456-5530; mosqueda@uci.edu

Aileen Wiglesworth, Ph.D.,

Department of Family Medicine, UC Irvine; UCIMC, 101 The City Drive South, Building 200, Suite 835, Orange, CA 92868; (714)456-7855; awiglesw@uci.edu

Alison A. Moore, MD, MPH,

Department of Family Medicine, UC Irvine; UC Irvine; UCIMC, 101 The City Drive South, Building 200, Suite 835, Orange, CA 92868; (714)456-7855 and Department of Medicine, UCLA, 10945 Le Conte Blvd, Suite 2339, Los Angeles, CA 90095aamoore@mednet.ucla.edu

Annie Nguyen, Ph.D.,

Department of Family Medicine, UC Irvine; UCIMC, 101 The City Drive South, Building 200, Suite 835, Orange, CA 92868; (714)456-8293; annieln1@uci.edu

Melanie Gironda, M.S.W., Ph.D., and

Department of Family Medicine, UC Irvine; UCIMC, 101 The City Drive South, Building 200, Suite 835, Orange, CA 92868; (714)456-7855, mgironda@uci.edu

Lisa Gibbs, M.D.

Department of Family Medicine, UC Irvine; UCIMC, 101 The City Drive South, Building 200, Suite 835, Orange, CA 92868; (714)456-5530; Igibbs@uci.edu

Abstract

Adult Protective Services (APS) workers in California investigate complaints of elder abuse and must determine the validity of a complaint with minimal guidelines. It is unclear whether APS workers reach similar conclusions given cases with similar circumstances. To assess variation in case findings and reasons for them, we used data from monthly reports of completed investigations, and investigation outcomes from all 58 California counties from September 2004 to August 2005, telephone interviews with 54 of 58 counties, and site visits to 17 counties. We also compared the data from 2004–5 with more recent data from 2013. Large variability was found from county to county in the proportions of cases found to be conclusive, inconclusive and unfounded. The combined analyses revealed significant differences in how individual APS workers interpret definitions of different types of case outcomes, varying skill and experience of the APS workers, individual and county agency factors, and other reasons that influence variability in case findings. Widespread inconsistencies in the outcomes of elder abuse investigations raise issues to be addressed on multiple levels, including the use of APS data for

developing policy, standardizing training of APS workers, and seeking just outcomes for the victims of elder abuse.

Keywords

mistreatment; justice; epidemiology

Introduction

One of the first steps in addressing any public health issue is to understand the size of the problem to be addressed. Accurate prevalence data regarding elder abuse is needed in order to tailor programs and policies to adequately serve the target population. However, estimating the prevalence of elder abuse is challenging. Many studies use data from Adult Protective Services (APS) to estimate the prevalence of elder abuse in the United States (Aceirno, 2010. National Center on Elder Abuse, 1998; Dong et al., 2009; Ernst & Smith, 2011; Goodrich, 1997; Lachs, Williams, O'Brien, & Pillemer, 2002; Reynolds & Shonfeld, 2004; Tatara, 1993; Teaster et al., 2006; Teaster & Roberto, 2000; Wangmo et al., 2013). These studies are limited by a number of factors, some of which are well understood. For example, APS data are limited to the elder abuse cases that are reported, but the majority of incidents are unreported (Thomas, 2000). Also, because of statutory and reporting differences from state to state, consolidation of multistate data is complicated and problematic (Duke, 2006; Teaster et al., 2007; Teaster, Roberto, Duke, & Kim, 2000). Indeed, most prevalence studies that rely on APS data use data from a single state jurisdiction, and the findings may or may not have broader application (Choi, Kulick, & Mayer, 1999; Choi & Mayer, 2000; Ernst & Smith, 2011; Hwalek, Neale, Goodrich, & Quinn, 1996; Lobell, 2006; Lundy & Grossman, 2004; National Aging Resource Center on Elder Abuse, 1991; Otiniano & Herrera, 1999; Payne & Gainey, 2005; Reynolds & Schonfeld, 2004).

Characteristics of specific agencies may also influence prevalence rates. In a multistate study of APS data published in 2003, Jogerst and colleagues found that rates of confirmed cases to total reports (i.e., substantiation ratios) were higher if the investigators were dedicated APS workers who were not also responsible for child abuse investigations. States that defined more specific types of abuse or required tracking numbers of reports as well as investigations also had higher substantiation rates (Jogerst et al., 2003). A survey of APS workers in 44 states and the District of Columbia (Jogerst et al., 2003) revealed other factors associated with higher substantiation ratios, including higher worker education requirements, greater length of formal training for workers, and attitudes of the workers. Adjusted rates of investigation and substantiation were higher for workers with a social work degree and for those who reported that the elder would benefit from the intervention.

Another possible factor affecting prevalence rates of elder abuse is how one interprets definitions of a case of elder abuse. The current study was designed to address a concern voiced by California APS directors and managers that the language in the reporting tool used to report cases of elder abuse (i.e. SOC 242) is subject to wide interpretation, thus

resulting in inconsistencies in the data collected and the conclusions reached. The goals of this study were 1) to conduct a systems evaluation to understand the process by which elder abuse data are collected in California and 2) to identify areas that may be improved to strengthen the consistency and reliability of data collection across agencies statewide.

The study was conducted using a formative evaluation framework with the aim of understanding the processes within a given system, in this case California APS. The goal of formative evaluation is to understand the internal dynamics of a system in order to improve it, as opposed to discovering generalizable findings beyond the setting in which the evaluation takes place. Qualitative inquiry is particularly appropriate for process studies because process experiences vary from one individual to another and may be subject to individual perception and interpretation so their experiences need to be captured in their own words (Patton, 2003).

APS in California

Each of California's 58 counties has its own APS office. APS is responsible for investigating complaints of abuse of people 65 years of age and older and dependent adults, aged 18–64, who are living in the community. The counties vary greatly in geographic size and features, including urban versus rural composition. County population sizes vary in number from 1,200 to 9,500,000 (United States Census Bureau, 2011). Some of the many features that vary among APS offices include the number of APS workers, and their educational level, training, and experience. In some smaller counties, an APS worker's efforts are spread across multiple social service functions, such as APS and Child Protective Services, while in larger counties social workers are dedicated to APS and may even specialize in elder abuse subtypes (e.g., in financial exploitation or self neglect).

APS Data in California: The SOC 242

In California, each county's APS office reports detailed data on APS investigations to the state department of social services monthly using a document called the SOC 242 (California Department of Social Services, 2013). The monthly data are consolidated statewide and published on the California Department of Social Services website (www.cdss.ca.gov). Each allegation of abuse or neglect is investigated by an APS worker to determine whether it is 'confirmed,' 'inconclusive' or 'unfounded.' The SOC 242 provides definitions of these terms. A *confirmed finding* is defined as, a decision is made that abuse occurred or most likely occurred based on an investigation accompanied with credible evidence. An *inconclusive finding* is defined as a decision that there is insufficient evidence to determine that abuse occurred, but the report is not unfounded after an APS investigation. An *unfounded finding* is defined as a decision that abuse did not occur as a result of an APS investigation. These terms are not further defined in any other sources. To assess and understand the variability in reporting of confirmed, unconfirmed and unfounded findings of elder abuse in the State of California, we conducted the present study by examining statewide data and assessing reasons for variability by interviewing APS workers.

Study Design and Methods

California county APS data from the California Department of Social Services were obtained for two time periods, from September 2004 through August 2005 and from January through December 2013. Structured phone and in-person interviews with APS employees familiar with data reporting were conducted following the collection of APS data from 2004–2005. IRB approval was received from the University of California, Irvine to conduct this study.

California Department of Social Services Data on Adult Protective Services and County Block Grant Monthly Statistical Report Data (SOC 242)

Monthly SOC 242 data from September 2004 through August 2005 for all 58 counties were obtained from the California Department of Social Services website (www.cdss.ca.gov/research.PG345.htm). For the entire state and for each county, the data on investigation findings were used to calculate three percentages: 1) confirmed, 2) inconclusive, and 3) unfounded cases. These percentages were calculated by dividing the number of confirmed, inconclusive and unfounded cases by the number of all cases that were completed by each county and overall for the entire state. To examine whether more recent SOC 242 data had similar variability in the rates of different categories of findings, we returned to the California Department of Social Services website (http://www.cdss.ca.gov/research/PG345.htm) and obtained APS data from January–December 2013. We compared the proportions of confirmed, inconclusive and unfounded cases for 2004–2005 and 2013 using the chi square test.

Conduct of Structured Telephone and In-person Interviews

Telephone and in-person interviews were conducted in order to explore the reasons for intercounty variability in the proportion of elder abuse cases that were confirmed, inconclusive or unfounded. First, we conducted telephone interviews with APS program managers about their local practices. We collected data on the number of APS workers in each office and asked questions to gather insights about county workers' comprehension of the definitions used to categorize cases as confirmed, inconclusive or unfounded. Finally we provided senior staff at each APS office with the 2004–2005 SOC 242 data for their county in comparison to data from the other counties and asked them to comment on the variability in the data.

Telephone interviews lasted about 30 minutes and were conducted by one of the study investigators (AW). Sixty-six APS staff (the senior staff and/or others selected by them who had field experience) from 54 of 58 county APS offices were interviewed. Four counties did not respond to the invitation to participate (n=3) or declined to participate (n=1).

Findings from the telephone interviews were used to inform the development of in-depth, inperson interviews with individual APS workers to further explore the questions in detail. One study investigator (AW) and a research assistant queried APS workers from 17 counties about the ways in which they categorized cases as confirmed, inconclusive or unfounded, and reasons why the proportions of cases in these three categories varied among the APS

workers in their offices. We again included a year's worth of SOC 242 data for their county in comparison to the entire state and asked them to comment on the variability of the data. One hour in-person interviews were conducted during 17 site visits. Sites were selected to represent the diverse geography and demographics of California as well as variation in data reporting practices and substantiation ratios as determined by the telephone interviews and SOC 242 data obtained from the California Department of Social Services website.

All telephone and in-person interview data were transcribed and analyzed by a single rater (AW) using a grounded theory approach to identify emergent themes and recurring categories within the narrative data (Charmaz, 2001; Ritchie & Spencer, 1994).

Results

SOC 242 Data from September 2004 to August 2005

The SOC 242 data for elder abuse from the entire state as well as for each of the 58 counties for the period September 2004 to August 2005 are compared to data from 2013 in Table 1. More than 50,000 elder abuse investigations were completed over the 12 month period in California. Of these investigations, 39.5% were confirmed, 40.5% were inconclusive and 21% were deemed unfounded. The numbers of completed investigations by each county varied widely ranging from 1 to 12,719. Similarly, there was a wide range in the percentages of confirmed (0-68%), inconclusive (10-100%) and unfounded (0-75%) cases. Compared to the 12 month data from 2004–2005, the data from January-December 2013 revealed that more total cases were completed (N=77,812), and there were lower percentages of confirmed (34% down from 39.5%) and unfounded (16% down from 21%) investigations and a higher percentage of inconclusive (50% up from 40.5%) investigations (p<0.001). The numbers of completed investigations by each county continued to vary widely (from 5 to 24,409 completed investigations) with several notable changes in the numbers by county. However, the percentages of confirmed (14–63%), inconclusive (12–81%) and unfounded (1–56%) cases remained widely variable across counties. Thus, despite the age of the SOC 242 data from 2004–2005, the variability across counties persisted in 2013. (Figure 1)

Telephone and In-person Interviews

The ratio of older adults in a county to the number of APS workers ranged from 976 to 17,845 among the 54 counties we interviewed. We identified differences in reporting practices for investigation findings across counties. Reported reasons for differences in a county's data reporting practices included 1) lack of formal definitions for confirmed, inconclusive and unfounded investigations, 2) differences in APS worker professional skills and experience, 3) differences in informal agency policies and individual worker preferences, 4) influences of the criminal justice system, 5) influences from Child Protective Services, and 6) concerns about resource allocation.

Lack of formal definitions—Because the definitions for confirmed, inconclusive, and unfounded findings are not clearly defined within the SOC 242, those interviewed reported that this allowed for a wide variety of interpretations of their meaning. Interviewees offered some suggestions on ways to define these terms. Some suggested using a confirmed finding

when the evidence for abuse outweighed the evidence against abuse. Others suggested applying "the reasonable man theory," that is, what would a reasonable man in like circumstances decide? Confirmed findings might also be used when the APS worker "reasonably suspects" that abuse has occurred and "there's significant evidence [the abuse] is occurring" or "there is evidence to support the allegation.".

APS workers indicated that the term inconclusive can be a catch-all category for everything that is neither confirmed nor unfounded. For example, it may be used when the investigating worker did not know who perpetrated the abuse, but knew that "somebody probably did." One interviewee stated that it may be used when there is "no straight, hard evidence that something has occurred, but there's a possibility that it could have occurred." Interviewees further suggested that inconclusive findings could range in meaning from "I don't know" to "I can't articulate why I think it happened." To some interviewees, an inconclusive finding also meant being "unable to make a finding" because there was no evidence other than the report itself. For example, one APS worker coded allegations as inconclusive if the client was never found at home, did not respond to calls or mailings, or would not provide access to allow an investigation. However, other interviewees stated that these situations should result in a finding of unfounded.

Unfounded denotations were used when there was lack of supporting evidence for abuse or when there was explicit evidence that abuse did not occur. The latter interpretation was given more frequently in the interviews. Interviewees stated that unfounded cases meant that abuse "absolutely, positively didn't happen," or that "there is no validity to the allegation.".

Differences in APS worker professional skills and experience—Many stated that variations in individual levels of skill, experience, and training can influence personal decisions on allegations and findings. There is a wide variety of training backgrounds among APS workers. Some do not have a social work degree while others may have a master's degree or prior work experience from other agencies such as Child Protective Services. For example, one supervisor thought that her county's high ratio of confirmed cases of elder abuse could be attributed to the fact that all social workers in her county had master's degrees. Others noted the need for training to improve consistency and accuracy for assigning types of allegations. Eight interviewees from different counties said their intake and field workers needed more training in assignment of allegations.

Differences in informal agency policies and individual worker preferences—

Agencies' preferences for certain case findings appear to underlie some of the variability found the proportions of cases found confirmed, unfounded or inconclusive. For instance, one manager stated that there had to be "a good reason to find an allegation inconclusive" as opposed to unfounded. In contrast, another manager stated that unfounded denotations should only be used when the worker was "really, really, really sure that there's nothing to[it]" and that everything else short of this level of certainty should be denoted as inconclusive. Some interviewees noted that individual social workers had preferences for one category over others. For example, one interviewee reported disliking the inconclusive option because she felt that others would interpret it to mean that nothing actually happened and therefore did not need attention.

Influences of criminal justice—There is evidence that some findings are made based on perceived criminal justice ramifications. One program manager described a case where a woman was allegedly being neglected by her husband but both of the individuals had dementia. The program manger advocated for finding such allegations as inconclusive because there is "no discernible malice or intent of harm, while conclusive would be if there was intent and/or malice." She reasoned that confirmed abuse cases are communicated to the police and that might not be "the right thing to do." Another manager related that an investigator from the county District Attorney's office encouraged APS workers to avoid unfounded findings because it made prosecuting the case more difficult. This manager further stated that social workers are motivated to help with both criminal and civil prosecutions.

Influences from Child Protective Services—Interviewees who were APS employees with prior experience in Child Protective Services (CPS) revealed a bias toward unfounded findings. When a child abuse case is confirmed, the perpetrator becomes enlisted on a Department of Justice (DOJ) database for life. Perpetrators can also appeal a confirmed finding. For these reasons some CPS workers are wary of confirming child abuse. In one county, everyone at the management level had prior experience with CPS and indicated that this history likely influenced their high rate of unfounded findings. Another group of APS supervisors with child welfare experience stated that although "CPS errs to unfounded as often as they can," APS perpetrators are not known to the DOJ, so their findings are not bound by the same considerations as CPS. Interviewees from another APS office with a large proportion of unfounded findings stated their preference not to create a "bad record" for a perpetrator.

Concerns about resource allocation—Some respondents stated that the perceived impact on resource allocation influenced social workers' conclusions. Several counties reported that an unfounded finding does not warrant the allocation of services. As a result, workers who find that there is a need for the elder or family to access services, although there may not have been abuse, are biased toward an inconclusive finding. One county admitted that they tended to confirm abuse if there was a risk factor that could be alleviated with access to resources.

Confirmation of self neglect and the autonomy issue—There is evidence that concern for the autonomy of elders impacts APS investigations and is a source of inconsistency in findings for cases of self neglect. APS workers are trained to respect the lifestyle choices of older adults who retain the ability to make decisions for themselves and are not impaired by cognitive dysfunction or mental illness to the point of incapacity. There is disagreement among APS offices and workers on how to handle situations in which an elder choose to be in a circumstance that others would not choose. However, there is agreement that these situations occur frequently. One program manager stated, "self-neglect isn't a protective issue when you have capacity." Another interviewee similarly said, "if someone is alert, oriented and refusing to talk with APS, we will close the case as unfounded if there is no sign of abuse by others." Some APS workers stated that they would confirm self-neglect in such cases regardless of the elder's competency.

In terms of issues of financial self-neglect, there was strong agreement amongst interviewees that elders with capacity have the right to give their money to whom they choose. As long as capacity is retained, the act cannot be considered financial self-neglect or perpetrated financial abuse even if it appears to other to be poor judgment. However, many expressed that it was sometimes difficult for social workers to make a clear determination of capacity.

Discussion

Using statewide data from each of the 58 counties in California, we observed wide ranges in the proportions of APS completed elder abuse investigations considered conclusive, inconclusive or unfounded. Qualitative analyses of our interview data indicated that differing interpretations of definitions of confirmed and inconclusive and unfounded case findings, expertise and practices are the major contributors to variation in the data.

For the reasons reported in the interviews, the true prevalence of elder abuse in the state is not known. Other more rigorous means of detecting elder abuse are needed to obtain accurate prevalence data and to inform policy decisions. Fortunately, a few epidemiological studies to assess incidence and prevalence of elder abuse have been done and others are ongoing (Acierno et al., 2010; Laumann, Leitsch, & Waite, 2008).

Some of the variability in case findings is due to the definitions of conclusive, inconclusive and unfounded findings. There is still no standardized language to clarify definitions across the state. Though differences in education and years of experience are unavoidable sources of variability in any work setting, establishing clear definitions and training to standardize the assignment of cases to different categories of findings can lessen the impact of such differences. The definitions in the SOC 242 for conclusive, unfounded, and inconclusive are that APS has investigated and decided that abuse did occur, or did not or they are unable to decide, respectively. Instructions state that confirmation should be "based on an investigation accompanied with credible evidence." Establishing a uniform definition for "credible evidence," can help workers distinguish the level of credibility between, for example, an eye-witness account of an incident versus a second-hand retelling of an occurrence.

Another example in which standardized guidelines may be useful is that of developing a statewide policy on how to address the issue of autonomy. Training can ensure that social workers follow identical guidelines in balancing respect for individual autonomy with concerns about the elder's safety when investigating a self-neglect case. Underlying the issue of autonomy is the question of how to determine whether an elder has the capacity for to make competent decisions. This is a complex and multi-faceted issue and one that deserves discussion within the field. While the determination of competency is perhaps outside of the purview of a single social worker, standardized policy can be helpful in informing workers on how and with whom to seek professional guidance in order to make an appropriate determination.

Bergeron highlighted the need for uniform educational background and training and a commitment to ongoing training to bring uniformity to APS decision-making processes

(Bergeron, 1999). She also suggested that biases may arise from variations in availability of needed community services or a particular worker's perspective on elders' rights to self-determination (Bergeron, 1999). This study confirms her findings and explores other reasons for the inconsistencies.

The interview data illustrate that concern over the consequences of the determinations influence social workers' decision of the determination. APS workers are concerned with the effects of their findings and, in these cases the investigation conclusions may represent their biases rather than objective evidence of the case. For example, how much certainty does a social worker need to find someone responsible for abuse? Will a finding of confirmed abuse lead to an unjust labeling of an alleged perpetrator? Social workers with child abuse investigations backgrounds appear to be more sensitive to these concerns.

Also, issues of cognition and capacity may be the crux of the question in multiple types of abuse. Elders with cognitive and mental dysfunction can be difficult to assess, yet whether an alleged victim is dependent on others for basic care or financial decisions is often the key to whether abuse has occurred. A social worker needs to be comfortable determining whether someone requires a cognitive assessment and needs access to a professional who can provide one. In the absence of this assessment, an accurate decision about findings sometimes cannot be determined.

The safety and well-being of elder abuse victims, or clients, should ultimately drive the imperative to address inconsistencies in elder abuse investigation. APS workers' findings have a significant impact on elder's lives. APS workers are often the first line of defense against elder abuse. As such, their response may be the client's only opportunity for assistance and it is critical that APS workers are provided with the training and resources needed to respond appropriately. An APS worker's finding that a case is unfounded may jeopardize the safety of the client. Or, a false finding of substantiated abuse may be unfair to an alleged perpetrator and cause an unnecessary change in caregivers and living situation. In short, findings have a profound impact on elder's lives and they deserve accurate and solid investigations.

The main limitation of the study is that a single rater coded the qualitative data, thus interrater reliability was not calculated. Also the original study was conducted in 2004–5, however, we compared the SOC 242 data from then to the data from 2013 and found similar variability in percentages of confirmed, unfounded and inconclusive cases. This demonstrates the continued need for uniformity of definitions of these types of case findings within the state of California.

Conclusion

This study reveals the inconsistency of APS reporting data within a single state. Findings from interviews and surveys in this study strongly suggest that clearly delineating the formal definitions of abuse and ensuring standardized education for APS workers will assist in more consistent data reporting. There are clear limitations of APS data for the design of

elder abuse incidence and prevalence studies and research. Without accurate APS data the ability to address research, education and policy issues is significantly hindered.

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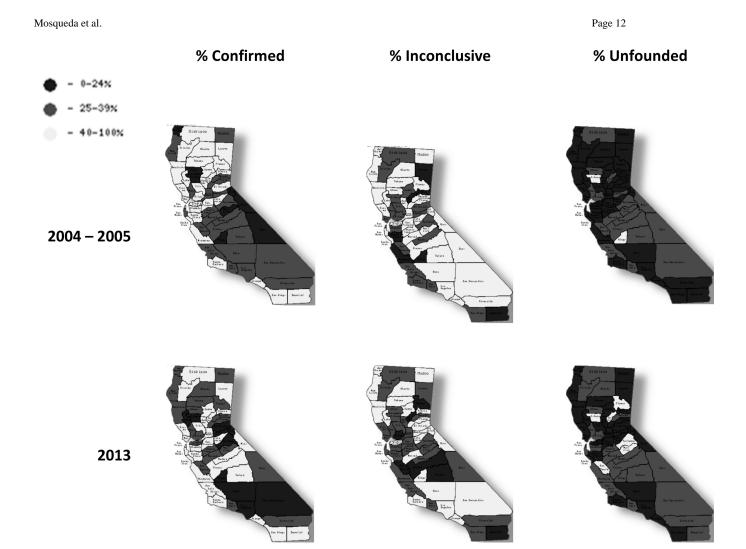


Figure 1.Percentage of completed, inconclusive and unfounded Adult Protective Services elder abuse investigations among California counties in 2004–2005 and 2013

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Table 1

SOC 242 Data: California Adult Protective Services Cases of adults aged 65 years and older from September 2004 to August 2005 and from January to December 2013

States County	Completed Investigations	ted tions	Confi Investigati	Confirmed Investigations N (%)	Inconclusive Investigations N	Inconclusive Investigations N (%)	Unfou Investigati	Unfounded Investigations N (%)
	2004–2005	2013	2004-2005	2013	2004-2005	2013	2004-2005	2013
California	54776	77812	(68) 66717	26131 (34)	24754 (45)	(05) 05688	8723 (16)	12731 (16)
Alameda	1268	1547	524 (41)	522 (34)	(98) (98)	(68) 809	284 (22)	422 (27)
Alpine	1	14	(0) 0	2 (14)	1 (100)	10 (11)	(0) 0	2 (14)
Amador	123	122	(68) 84	26 (21)	38 (31)	(99) 18	(08) LE	15 (12)
Butte	377	98£	151 (40)	157 (41)	147 (39)	155 (40)	(12) 62	74 (19)
Calaveras	75	136	33 (44)	63 (46)	(52) 14	58 (43)	1 (1)	15 (11)
Colusa	09	40	7 (12)	5 (13)	20 (33)	13 (33)	(33 (22)	22 (55)
Contra Costa	642	088	308 (48)	273 (33)	275 (43)	385 (46)	(6) 65	172 (21)
Del Norte	142	138	31 (22)	38 (28)	77 (54)	(05) 69	34 (24)	31 (22)
El Dorado	168	412	(46) 88	95 (23)	(8£) £9	(235 (57)	23 (14)	82 (20)
Fresno	1203	1991	313 (26)	687 (41)	552 (46)	353 (21)	338 (28)	627 (38)
Glenn	46	88	11 (24)	12 (32)	(14) (11)	14 (37)	16 (35)	12 (32)
Humboldt	296	387	105 (35)	126 (33)	161 (54)	192 (50)	30 (10)	69 (18)
Imperial	274	379	155 (57)	189 (50)	54 (20)	71 (19)	65 (24)	119 (31)
Inyo	99	62	8 (12)	25 (32)	(65) 68	23 (29)	(62) 61	31 (39)
Kern	1193	1595	440 (37)	278 (17)	618 (52)	1299 (81)	135 (11)	18 (1)
Kings	451	300	67 (15)	50 (17)	45 (10)	151 (50)	339 (75)	99 (33)
Lake	107	294	55 (51)	72 (24)	52 (49)	198 (67)	0 (0)	24 (8)
Lassen	93	100	49 (53)	50 (50)	22 (24)	34 (34)	22 (24)	16 (16)
Los Angeles	12719	24409	4602 (36)	5373 (22)	(09) L89L	18732 (77)	430 (3)	304 (1)
Madera	294	296	104 (35)	122 (41)	87 (30)	80 (27)	103 (35)	94 (32)
Marin	224	556	110 (49)	277 (50)	66 (28)	159 (29)	48 (21)	120 (22)
Mariposa	47	75	6 (13)	24 (32)	27 (57)	21 (28)	14 (30)	30 (40)
Mendocino	294	477	135 (46)	165 (35)	140 (48)	209 (44)	(9) 61	103 (22)

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1282 (22) 1801 (32) 122 (26) 151 (4) 34 (18) 2667 (38) 478 (17) 284 (12) 94 (12) 190 (25) 286 (26) 114 (12) 251 (12) 30 (10) 198 (25) 227 (39) 386 (28) 86 (29) 14 (56) 47 (55) 40 (29) 185 (10) 12 (15) 82 (30) 71 (25) 3 (11) Unfounded Investigations N (%) 1 (20) 2013 1 (3) 2004-2005 1281 (30) 1096 (24) 989 (19) 135 (11) 126 (21) 100 (20) 577 (17) 165 (34) 180 (22) 160 (30) 282 (9) 26 (35) 239 (19) 99 (25) 39 (23) 73 (12) 103 (7) 35 (28) 55 (27) 63 (9) 1 (20) 1 (5) 4 (25) 2(3) 9 (1) 7 (1) 4 (2) 0)0 1777 (50) 114 (41) 101 (34) 103 (36) 101 (54) 1987 (34) 421 (43) 665 (31) 325 (41) 923 (33) 2621 (46) 617 (25) 283 (37) 206 (28) 321 (29) 140 (45) 124 (22) 534 (38) 2272 (33) 11 (13) 17 (63) 158 (34) 39 (29) 603 (34) 14 (48) 3 (12) 27 (33) 2 (40) Inconclusive Investigations N (%) 2013 2004-2005 1327 (43) 1725 (40) 1959 (57) 1982 (43) 390 (50) 314 (37) 178 (46) 271 (54) 1890 (36) 378 (25) 158 (32) 373 (45) 201 (16) 138 (54) 346 (47) 146 (27) 503 (41) 234 (40) 309 (51) 53 (52) 15 (68) 10 (63) 41 (24) 74 (36) 28 (48) 21 (28) 38 (30) 1 (20) 107 (36) 112 (39) 1648 (46) 2031 (29) 1355 (49) 1262 (22) 2595 (44) 1564 (63) 389 (51) 501 (45) 1228 (57) 225 (39) 1001 (56) 477 (34) 186 (40) 437 (45) 141 (45) 264 (34) 52 (28) 28 (33) 350 (47) 79 (29) 14 (48) 8 (32) 57 (42) 42 (52) Confirmed Investigations N (%) 7 (26) 2 (40) 2013 2303 (44) 2004-2005 1012 (68) 112 (29) 131 (26) 1490 (48) 224 (37) 908 (26) 1493 (33) 1316 (30) 382 (49) 168 (34) 274 (33) 535 (63) 807 (65) 115 (45) 332 (45) 230 (43) 229 (39) 75 (37) 596 (48) 88 (52) 28 (48) 28 (37) 54 (43) 49 (48) 2 (13) 3 (60) 6 (27) 2013 3576 2756 5684 2465 1108 2144 1789 0269 5864 1397 972 275 466 286 187 992 746 787 136 576 294 311 27 29 25 86 8 Completed Investigations 3 2004-2005 3444 4322 3099 5182 1493 1247 1234 389 168 204 502 909 4571 491 827 856 257 741 536 102 16 28 75 781 127 589 22 San Luis Obispo San Bernardino Santa Barbara San Francisco State/County San Joaquin Santa Cruz Sacramento San Mateo Santa Clara San Benito San Diego Stanislaus Monterey Riverside Siskiyou Merced Nevada Sonoma Orange Plumas Modoc Solano Placer Shasta Sierra Sutter Mono Napa

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State/County	Completed Investigations	ted tions	Confirmed Investigations N (%)	rmed ons N (%)	Inconclusive Investigations N (%)	lusive ons N (%)	Unfounded Investigations N (%)	Unfounded stigations N (%)
	2004-2005	2013	2004-2005	2013	2004-2005	2013	2004-2005	2013
Tehama	173	210	70 (40)	(88)	(94) 08	101 (48)	23 (13)	50 (24)
Trinity	65	78	24 (49)	37 (47)	17 (35)	21 (27)	8 (16)	20 (26)
Tulare	263	653	173 (31)	(94) 662	223 (40)	155 (24)	167 (30)	199 (30)
Tuolumne	861	263	(23)	38 (14)	67 (34)	97 (37)	65 (33)	128 (49)
Ventura	1227	2106	393 (32)	(88) (33)	451 (37)	824 (39)	383 (31)	593 (28)
Yolo	252	278	124 (49)	161 (58)	82 (33)	72 (26)	46 (18)	45 (16)
Yuba	207	139	115 (56)	55 (40)	(61) 04	26 (19)	52 (25)	58 (42)

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