B. COLLECTION OF INFORMATION INVOLVING STATISTICAL METHODS

B.1. Respondent Universe and Sampling Methods

The universe for this data collection effort is the 50 States, the District of Columbia, and Puerto Rico (hereafter *the States*). Every attempt will be made to collect data from every member of the universe rather than sampling the States. This approach will provide the maximum amount of data, and will allow all States the opportunity to offer their input and consultation on a matter that may have significant impacts on their future work.

For each State, data will be collected from the child welfare agency director and individual staff that he/she will designate as qualified and available to respond to each of the data collection instruments, including the Prevalence Study and the topical questionnaires in the Key Informant Survey.

B.2. Information Collection Procedures

This study will seek the participation of all State child welfare agencies, which are the most likely contributors to a possible national registry of child maltreatment perpetrators, in the 50 States, District of Columbia, and Puerto Rico. In States that have more than one data repository for information on maltreatment perpetrators, other agencies that maintain relevant data will also be asked to participate.

Recruitment

Recruitment will be multi-faceted since there are two different types of participation being asked of the States: 1) submission of data to gain a greater understanding of the prevalence of perpetrators who may have been substantiated in other States (the Prevalence Study), and 2) response to questionnaires on legal and policy issues, current practices related to requesting and responding to inquiries, and data repository technical issues (the Key Informant Survey). The recruitment of participants to the study will include several activities, as follows.

- Identifying State Primary Contacts—Information on potential contacts in each State is being assembled, and will be updated prior to beginning formal recruitment.
- Awareness Building—State child welfare agencies will be informed of the study and their input sought as to the best recruitment strategies.
- Recruitment Package and Methods—Once OMB approval is received, recruitment materials, providing information and soliciting involvement in the study, will be sent to each of the previously identified State contacts. Both pre-

and post-telephone contacts will be made to facilitate recruitment.

- Procedures When Initial Response is Negative—It is anticipated that a number of State contacts will initially refuse participation. A number of additional recruitment steps will be taken to maximize participation rates (See section B.3, below).
- Procedures When Response is Positive—Once designated respondents have been identified, they will be contacted and provided information on the Prevalence Study or on how to access the survey questionnaires, as appropriate. The recruiters will work closely to answer all questions related to participation, confirm participation as necessary, and monitor the response rates to each study component. Additional assistance will be provided as needed.

Primary contacts for each State (child welfare directors) will be asked to identify by name, title, agency, email address, and telephone number the individuals who will be responsible for assisting with the Prevalence Study and Key Informant Survey.

Drafts of letters and materials to be used in the recruitment process are located in appendices H, I, J.

Data Collection

The National Child Abuse and Neglect Data System (NCANDS) and State child welfare information systems are the sources for the data to be used in the Prevalence Study component of the larger study.

NCANDS was chosen as the initial data source for the study for several reasons. It contains information on almost all substantiated maltreatment perpetrators in the U.S. by State for the last five years. It includes comparable data for most States and the District of Columbia, greatly facilitating interstate comparisons. It contains the information needed to examine interstate perpetrators by adjacency and maltreatment type. In addition, it contains measures that are useful for identifying interstate perpetrators. Finally, using NCANDS data allows the study team to do all of the matching work and most of the data preparation, minimizing the burden on participating States. The Children's Bureau has approved the use of NCANDS data files for this study.

State information systems will be the source of name information and selected perpetrator demographic characteristics required for the matching procedure. To reduce the burden of State participation in the study and to preserve confidentiality, States will be provided with files containing the encrypted perpetrator IDs extracted from NCANDS and a program to encode names for matching purposes. States will extract name and perpetrator demographics from their information systems and will encode the names using the supplied software. The information they have extracted and encoded will be submitted and linked back to the NCANDS records by the study team. This will create records with the perpetrator encoded names, perpetrator demographics, maltreatment information, and

child victim information required to support the analyses needed. Names will be similarly encoded for all states.

The type of encoding being proposed is typically referred to as Soundex or phonetic coding. It uses a <u>phonetic algorithm</u> for indexing names by sound, as <u>pronounced</u> in English. The goal is for <u>similar</u> names to be <u>encoded</u> to the same representation so that they can be matched despite minor differences in <u>spelling</u>. The resulting code is typically the first letter of the last name followed by a string of numbers and or alpha characters.

The particular algorithm to be used in the Prevalence Study is the <u>NYSIIS</u> algorithm. It was developed and implemented in the New York State Identification and Intelligence System in 1970. It is considered to be an improvement over a more widely known phonetic coding system, providing an accuracy increase of 2.7% over the traditional <u>Soundex</u> algorithm.¹ NYSIIS differs from Soundex in that it retains information about the position of vowels in the encoded name.

The States will be provided with a software application that will handle the encoding procedure. In addition, States will be given instructions that address extracting name and perpetrator demographics from their systems, running the encoding and formatting application, and submitting the resulting file. These instructions may be found in appendix H.

Data for the Key Informant Survey will be collected by web-based survey for the three questionnaires. These questionnaires can be found in appendices C, D, and E.

The Web-based approach is cost effective and will provide higher quality data than alternative methodologies. The flexibility of this methodology offers key informants the ability to respond to questions at times that best fit their schedules and at their own pace, and the minimal respondent burden provides the best means for reaching our recruitment goals.

The questionnaires will be formatted for online administration using Survey Monkey[™] (<u>www.surveymonkey.com</u>). The data security features of the system have been reviewed and approved by Committees for the Protection of Human Subjects. The URL to access the online questionnaires will consist of a title representative of the survey, such as <u>www.nationalregsurvey.com</u>.

B.3. Methods to Maximize Response Rates and Deal with Nonresponse

In cases where the recruitment process concludes with the recruiter unable to convince a State to participate in the study, additional steps will be taken to facilitate successful recruitment. The first option will be to request that the State participate in one of the study components, the Prevalence Study or the Key Informant Survey. Ultimately,

¹ Rajkovic, P., and Jankovic, D. (2007) "Adaption and Application of Daitch-Mokotoff Soundex Algorithm on Serbian Names," *XVII Conference on Applied mathematics*, Novi Sad, Serbia

Directors who initially agree to one study component may eventually agree to full study participation. Follow-up requests will be made to investigate a change of mind after successfully gaining participation in the first study component.

Specific strategies will be further employed for States that refuse participation in both study components and will depend on the reason provided for refusal. When reason for non-participation is related to overall burden, a call back in 30 days will be made to see if the workload has changed. At this time, an offer will be made to administer the Key Informant Survey instruments by phone to reduce any perceived burden barriers. If necessary, the period for data collection will be extended in order to maximize participation.

If Congress were to implement a National Registry of Child Maltreatment Perpetrators, this would have significant implications for the States in terms of both the benefits and potential costs of participation. For this reason, we expect the States will view this study as an important opportunity to influence the Congress' decision on this matter, and will therefore be motivated to participate. Based on this expectation, and on previous experience with a study of similar respondents, conducted by the National Study of Child Protective Services Systems and Reform Efforts, an approximate overall 80 percent participation rate is expected.

In summary, a number of recruitment attempts will be made and various options for participation will be presented over the course of the data collection phase of the study to elicit full or partial study participation. The data and outcome of these attempts will be recorded in the State recruitment and tracking database.

B.4. Tests of Procedures

The survey instruments and data collection procedures for both the Prevalence Study and the Key Informant Survey were pilot-tested in five States: Connecticut, Delaware, Illinois, Minnesota, and New Mexico.

Results for the Prevalence Study were very positive, and revealed no problems requiring adjustments to the procedure or design. Analyses of responses to the Key Informant Survey questionnaires revealed minor problems with the clarity of a number of questions, which have been re-written for greater clarity.

B.5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data.

All persons involved or expected to be involved in data collection design, data collection, and analysis are staff members of Walter R. McDonald & Associates, Inc. Contact information is supplied below.

Name	Email	Phone	Design	Data Collection	Analysis
Ying-Ying Yuan	yyyuan@wrma.com	(301) 881-2590	\checkmark	\checkmark	\checkmark
Brett Brown	bbrown@wrma.com	(301) 881-2590	\checkmark	\checkmark	\checkmark
Fred Molitor	fmolitor@wrma.com	(916) 239-4020	\checkmark	\checkmark	\checkmark